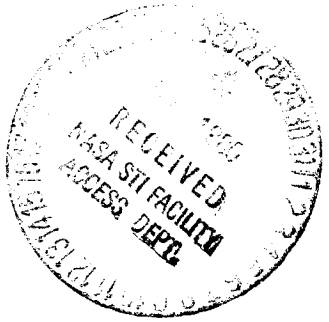
NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS

INDEX OF NACA TECHNICAL PUBLICATIONS

June, 1955 - June, 1956



NACA

WASHINGTON - 1956

PREFACE

This Index of NACA Technical Publications covers those NACA research reports issued in the period of June 1955 through June 1956. It is the fifth supplement to the basic 1919-1949 Index.

The research reports issued prior to June 1955 which have been declassified since that date have also been included. In addition, current announcement of newly declassified materials is regularly made in the NACA Research Abstracts and Reclassification Notice.

The arrangement of the present Index follows that of its predecessors: (1) A listing of the subject categories by numerical classifications, (2) a chronological listing of the NACA research reports under each subject category, (3) an alphabetical index to the subject categories, and (4) an author index. An Explanatory Chart on page iii may be helpful in identifying references to NACA research reports encountered in the literature.

Entries included herein duplicate in part the information of the index cards furnished with the individual research reports. Recipients maintaining card files may wish to discard those index cards on hand for unclassified research reports issued during the June 1955-June 1956 period.

Newly available research reports are currently announced in the NACA Research Abstracts and Reclassification Notice and are normally available for a period of five years after announcement. Most of the older research reports (those issued prior to May 1951) are thus available on a "loan only" basis within the United States. Requests for NACA research reports should be forwarded to the address given below.

Division of Research Information
National Advisory Committee for Aeronautics
1512 H Street, N. W.
Washington 25, D. C.

December 1, 1956

EXPLANATORY CHART OF NACA PUBLICATIONS SERIES
DESIGNATIONS

PUBLICATIONS SERIES	SYMBOL	CURRENTLY ISSUED	NUMBERED CONSECUTIVELY	NUMBER BASED ON LABORATORY** OF ORIGIN	NUMBER BASED ON DATE OF ISSUE-YEAR* MONTH# DAY###	EXAMPLE WITH EXPLANATION
Reports	None	Yes	Yes	No	No	Report 1004 - 1004th Report issued.
Research Memorandums	RM	Yes	No	Yes	Yes	RM L9K03a - Research Memorandum written by Langley Laboratory Personnel in 1949 and issued on November 3rd, being the second RM released on that date.
Technical Memorandums	TM	Yes	Yes	No	No	TM 1313 - 1313th Technical Memorandum issued.
Technical Notes	TN	Yes	Yes	No	No	TN 2432 - 2432nd Technical Note issued.
Wartime Reports	WR	No	Yes	Yes	No	WR A-6 - 6th Wartime Report issued that was based on Ames Laboratory research. Reported earlier to a limited audience and was reprinted.
Adv. Conf. Reports	ACR	No	No	Yes, after March, 1944##	Yes, after April, 1943##	ACR E4D19 - Advance Confidential Report written by Lewis Laboratory personnel in 1944 and issued on April 19th.
Adv. Rest'd. Reports	ARR	No	No	Yes, after March, 1944##	Yes, after April, 1943##	ARR L4K22b - Advance Restricted Report written by Langley Laboratory personnel in 1944 and issued on November 22nd, being the 3rd ARR issued on that date.
Conf. Bulletins	CB	No	No	Yes, after March, 1944##	Yes, after April, 1943##	CB E5J11 - Confidential Bulletin written by Lewis Laboratory personnel in 1945 and issued October 11th.
Memorandum Reports	MR	No	No	Yes, after October, 1944##	Yes, after October, 1944##	MR A4L12 - Memorandum Report written by Ames Laboratory personnel in 1944 and issued on December 12th.
Restricted Bulletins	RB	No	No	Yes, after March, 1944##	Yes, after April, 1943##	RB E6D22 - Restricted Bulletin written by Lewis Laboratory personnel in 1946 and issued on April 22nd.
Aircraft Circulars	AC	No	Yes	No	No	AC 150 - 150th Aircraft Circular issued.

Symbol and date only used prior to date mentioned.

**A - Ames
E - Lewis
L - Langley

*5 - 1945
6 - 1946
7 - 1947
8 - 1948
9 - 1949
50 - 1950
51 - 1951
52 - 1952

#A - January
B - February
C - March
D - April
E - May
F - June
G - July
H - August
I - September
J - October
K - November
L - December

01
02
03 . . etc. to 31 followed by
a - 2nd document issued that date
b - 3rd document issued that date

*No reports under this category for this period.

*No reports under this category for this period.

*No reports under this category for this period.

*No reports under this category for this period.

(1)
AERODYNAMICS

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AERODYNAMICS

REMARK ON THE THEORY OF LIFTING SURFACES. (Sulla teoria delle superfici portanti). Aldo Muggia. January 1956. 11p. diagrs. (NACA TM 1386. Trans. from Atti della Accademia delle Scienze di Torino, v. 87, 1952-1953)

A FLAT WING WITH SHARP EDGES IN A SUPERSONIC STREAM. A. E. Donov. March 1956. 48p. diagrs. (NACA TM 1394. Trans. from Akademiia NAUK SSSR, Izvestiia, 1939, p. 603-626)

(1.1)
Fundamental Aerodynamics

PRELIMINARY INVESTIGATION OF EFFECTIVENESS OF BASE BLEED IN REDUCING DRAG OF BLUNT-BASE BODIES IN SUPERSONIC STREAM. Edgar M. Cortright, Jr., and Albert H. Schroeder. March 9, 1951. 23p. diagrs., photos. (NACA RM E51A26)

A UNIFIED TWO-DIMENSIONAL APPROACH TO THE CALCULATION OF THREE-DIMENSIONAL HYPERSONIC FLOWS, WITH APPLICATION TO BODIES OF REVOLUTION. A. J. Eggers, Jr. and Raymond C. Savin. 1955. ii, 27p. diagrs., tab. (NACA Rept. 1249. Supersedes TN 2811)

MAXIMUM THEOREMS AND REFLECTIONS OF SIMPLE WAVES. P. Germain, Brown University. June 1955. 22p. (NACA TN 3299)

A FLAT WING WITH SHARP EDGES IN A SUPERSONIC STREAM. A. E. Donov. March 1956. 48p. diagrs. (NACA TM 1394. Trans. from Akademiia NAUK SSSR, Izvestiia, 1939, p. 603-626)

FORMATION OF A VORTEX AT THE EDGE OF A PLATE. (Ausbildung eines Wirbels an der Kante einer Platte). Leo Anton. March 1956. 36p. diagrs. (NACA TM 1398. Trans. from Ingenieur-Archiv, v. 10, 1939, p. 411-427)

HEAT CAPACITY LAG OF GASEOUS MIXTURES. Thomas D. Rossing, Robert C. Amme, and Sam Legvold, Iowa State College. March 1956. 35p. diagrs., tabs. (NACA TN 3558)

(1.1.1)
INCOMPRESSIBLE FLOW

RESULTS OF TWO FREE-FALL EXPERIMENTS ON FLUTTER OF THIN UNSWEPT WINGS IN THE TRANSONIC SPEED RANGE. William T. Lauten, Jr., and Herbert C. Nelson. May 8, 1951. 26p. diagrs., photo., tabs. (NACA RM L51C08)

THE STRUCTURE OF TURBULENCE IN FULLY DEVELOPED PIPE FLOW. John Laufer, National Bureau of Standards. 1954. ii, 18p. diagrs. (NACA Rept. 1174. Formerly TN 2954)

THE NORMAL COMPONENT OF THE INDUCED VELOCITY IN THE VICINITY OF A LIFTING ROTOR AND SOME EXAMPLES OF ITS APPLICATION. Walter Castles, Jr. and Jacob Henri De Leeuw, Georgia Institute of Technology. 1954. ii, 15p. diagrs., 3 tabs. (NACA Rept. 1184. Formerly TN 2912)

IMPINGEMENT OF CLOUD DROPLETS ON A CYLINDER AND PROCEDURE FOR MEASURING LIQUID-WATER CONTENT AND DROPLET SIZES IN SUPERCOOLED CLOUDS BY ROTATING MULTICYLINDER METHOD. R. J. Brun, W. Lewis, P. J. Perkins and J. S. Serafini. Appendix E: ALTERNATE METHOD OF REDUCING ROTATING MULTICYLINDER DATA. Paul T. Hacker. 1955. iv, 43p. diagrs., photos., tabs. (NACA Rept. 1215. Supersedes TN 2903; TN 2904; RM E53D23)

THEORETICAL ANALYSIS OF INCOMPRESSIBLE FLOW THROUGH A RADIAL-INLET CENTRIFUGAL IMPELLER AT VARIOUS WEIGHT FLOWS. I - SOLUTION BY A MATRIX METHOD AND COMPARISON WITH AN APPROXIMATE METHOD. Vasily D. Prian, James J. Kramer and Chung-Hua Wu. June 1955. 39p. diagrs., tab. (NACA TN 3448)

THEORETICAL ANALYSIS OF INCOMPRESSIBLE FLOW THROUGH A RADIAL-INLET CENTRIFUGAL IMPELLER AT VARIOUS WEIGHT FLOWS. II - SOLUTION IN LEADING-EDGE REGION BY RELAXATION METHODS. James J. Kramer. June 1955. 19p. diagrs. (NACA TN 3449)

REMARK ON THE THEORY OF LIFTING SURFACES. (Sulla teoria delle superfici portanti). Aldo Muggia. January 1956. 11p. diagrs. (NACA TM 1386. Trans. from Atti della Accademia delle Scienze di Torino, v. 87, 1952-1953)

FORMATION OF A VORTEX AT THE EDGE OF A PLATE. (Ausbildung eines Wirbels an der Kante einer Platte). Leo Anton. March 1956. 36p. diagrs. (NACA TM 1398. Trans. from Ingenieur-Archiv, v. 10, 1939, p. 411-427)

DETERMINATION OF VORTEX PATHS BY SERIES EXPANSION TECHNIQUE WITH APPLICATION TO CRUCIFORM WINGS. Alberta Y. Alksne. April 1956. 40p. diagrs., photos. (NACA TN 3670)

NORMAL COMPONENT OF INDUCED VELOCITY IN THE VICINITY OF A LIFTING ROTOR WITH A NONUNIFORM DISK LOADING. Harry H. Heyson and S. Katzoff. April 1956. i, 45p. diagrs. (NACA TN 3690)

BOUNDARY LAYER. (Pogranichnyi sloi). L. G. Loitsianskii. May 1956. 29p. (NACA TM 1400. Trans. from Mechanics in the U.S.S.R. over Thirty Years, 1917-1947, p. 300-320)

(1.1.2)
COMPRESSIBLE FLOW

RESULTS OF TWO FREE-FALL EXPERIMENTS ON FLUTTER OF THIN UNSWEPT WINGS IN THE TRANSONIC SPEED RANGE. William T. Lauten, Jr., and Herbert C. Nelson. May 8, 1951. 26p. diagrs., photo., tabs. (NACA RM L51C08)

PRELIMINARY AIR-FLOW AND THRUST CALIBRATIONS OF SEVERAL CONICAL COOLING-AIR EJECTORS WITH A PRIMARY TO SECONDARY TEMPERATURE RATIO OF 1.0. I - DIAMETER RATIOS OF 1.21 AND 1.10. W. K. Greathouse and D. P. Hollister. July 1952. 24p. diagrs. (NACA RM E52E21)

PRELIMINARY AIR-FLOW AND THRUST CALIBRATIONS OF SEVERAL CONICAL COOLING-AIR EJECTORS WITH A PRIMARY TO SECONDARY TEMPERATURE RATIO OF 1.0. II - DIAMETER RATIOS OF 1.06 AND 1.40. W. K. Greathouse and D. P. Hollister. August 1952. 35p. diagrs. (NACA RM E52F26)

DEVELOPMENT OF TURBULENCE-MEASURING EQUIPMENT. Leslie S. G. Kovásznay, John Hopkins University. 1954. ii, 30p. diagrs., photos., tab. (NACA Rept. 1209. Supersedes TN 2839)

A SUMMARY OF INFORMATION ON SUPPORT INTERFERENCE AT TRANSONIC AND SUPERSONIC SPEEDS. Eugene S. Love. January 1954. 26p. diagrs. (NACA RM L53K12)

A CORRELATION BY MEANS OF TRANSONIC SIMILARITY RULES OF EXPERIMENTALLY DETERMINED CHARACTERISTICS OF A SERIES OF SYMMETRICAL AND CAMBERED WINGS OF RECTANGULAR PLAN FORM. John B. McDevitt. 1955. ii, 23p. diagrs., tabs. (NACA Rept. 1253. Supersedes RM A51L17b; RM A53G31)

ESTIMATION OF INLET LIP FORCES AT SUBSONIC AND SUPERSONIC SPEEDS. W. E. Moeckel. June 1955. 12p. diagrs. (NACA TN 3457)

RECOVERY AND TIME-RESPONSE CHARACTERISTICS OF SIX THERMOCOUPLE PROBES IN SUBSONIC AND SUPERSONIC FLOW. Truman M. Stickney. July 1955. 25p. diagrs., photos., 2 tabs. (NACA TN 3455)

PRELIMINARY PERFORMANCE DATA OF SEVERAL TAIL-PIPE-CASCADE-TYPE MODEL THRUST REVERSERS. James G. Henzel, Jr. and Jack G. McArdle. August 1955. 48p. diagrs., photos., tab. (NACA RM E55F09)

MEASUREMENTS OF TURBULENT SKIN FRICTION ON A FLAT PLATE AT TRANSONIC SPEEDS. Raimo J(aakko) Hakkinen, California Institute of Technology. September 1955. 41p. diagrs., photo., tabs. (NACA TN 3486)

AVERAGING OF PERIODIC PRESSURE PULSATIONS BY A TOTAL-PRESSURE PROBE. R. C. Johnson. October 1955. 30p. diagrs., photo., tabs. (NACA TN 3568)

SUMMARY OF RESULTS OBTAINED BY TRANSONIC-BUMP METHOD ON EFFECTS OF PLAN FORM AND THICKNESS ON LIFT AND DRAG CHARACTERISTICS OF WINGS AT TRANSONIC SPEEDS. Edward C. Polhamus. November 1955. 33p. diagrs., tab. (NACA TN 3469. Supersedes RM L51H30)

COMPRESSIBLE LAMINAR BOUNDARY LAYER AND HEAT TRANSFER FOR UNSTEADY MOTIONS OF A FLAT PLATE. Simon Ostrach. November 1955. 26p. diagrs., tab. (NACA TN 3569)

TURBULENT HEAT-TRANSFER MEASUREMENTS AT A MACH NUMBER OF 0.87. Maurice J. Brevoort and Bernard Kashis. December 1955. 13p. diagrs. (NACA TN 3599)

EFFECT OF TRANSVERSE BODY FORCE ON CHANNEL FLOW WITH SMALL HEAT ADDITION. Simon Ostrach and Franklin K. Moore. February 1956. 31p. diagrs. (NACA TN 3594)

ON THE GAS DYNAMICS OF A ROTATING IMPELLER. (Zur Gasdynamik des drehenden Schaufelsterns). A. Busemann. March 1956. 16p. diagrs. (NACA TM 1385. Trans. from Zeitschrift für angewandte Mathematik und Mechanik, v. 18, no. 1, February 1938, p. 31-38)

A FLAT WING WITH SHARP EDGES IN A SUPERSONIC STREAM. A. E. Donov. March 1956. 48p. diagrs. (NACA TM 1394. Trans. from Akademiia NAUK SSSR, Izvestiia, 1939, p. 603-626)

BOUNDARY-LAYER GROWTH AND SHOCK ATTENUATION IN A SHOCK TUBE WITH ROUGHNESS. Paul W. Huber and Donald R. McFarland. March 1956. 49p. diagrs., photos., tab. (NACA TN 3627)

DISCHARGE COEFFICIENTS FOR COMBUSTOR-LINER AIR-ENTRY HOLES. I - CIRCULAR HOLES WITH PARALLEL FLOW. Ralph T. Dittrich and Charles C. Graves. April 1956. 39p. diagrs. (NACA TN 3663)

BOUNDARY LAYER. (Pogranichnyi sloi). L. G. Loitsianskii. May 1956. 29p. (NACA TM 1400. Trans. from Mechanics in the U.S.S.R. over Thirty Years, 1917-1947, p. 300-320)

(1.1.2.1) SUBSONIC FLOW

ANALYSIS AND EXPERIMENTAL OBSERVATION OF PRESSURE LOSSES IN RAM-JET COMBUSTION CHAMBERS. William H. Sterbentz. November 4, 1949. 22p. diagrs. (NACA RM E9H19)

PRESSURE MEASUREMENTS ON A BODY OF REVOLUTION IN THE LANGLEY 16-FOOT TRANSONIC TUNNEL AND A COMPARISON WITH FREE-FALL DATA. Joseph M. Hallissy, Jr. March 1952. 19p. diagrs. (NACA RM L51L07a)

TRANSONIC DRAG CHARACTERISTICS AND PRESSURE DISTRIBUTION ON THE BODY OF A WING-BODY COMBINATION CONSISTING OF A BODY OF REVOLUTION OF FINENESS RATIO 12 AND A WING HAVING SWEEPBACK OF 45^{o}, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTIONS. Max C. Kurbjun and Jim Rogers Thompson. April 1952. 28p. diagrs., photo., tabs. (NACA RM L52B12)

FREE-FALL MEASUREMENTS OF THE EFFECTS OF WING-BODY INTERFERENCE ON THE TRANSONIC DRAG CHARACTERISTICS OF SWEPT-WING-SLENDER-BODY CONFIGURATIONS. Max C. Kurbjun and Jim Rogers Thompson. May 1953. 34p. diagrs., photos., tabs. (NACA RM L53C31)

FLOW DIFFUSION IN A CONSTANT-DIAMETER DUCT DOWNSTREAM OF AN ABRUPTLY TERMINATED CENTER BODY. Charles C. Wood and James T. Higginbotham. July 1953. 27p. diagrs. (NACA RM L53D23)

ON THE DEVELOPMENT OF TURBULENT WAKES FROM VORTEX STREETS. Anatol Roshko, California Institute of Technology. 1954. ii, 25p. diagrs., photos., 3 tabs. (NACA Rept. 1191. Formerly TN 2913)

THEORETICAL PERFORMANCE CHARACTERISTICS OF SHARP-LIP INLETS AT SUBSONIC SPEEDS. Evan A. Fradenburgh and DeMarquis D. Wyatt. 1954. ii, 8p. diagrs. (NACA Rept. 1193. Formerly TN 3004)

PERFORMANCE AND BOUNDARY-LAYER DATA FROM 12^{o} AND 23^{o} CONICAL DIFFUSERS OF AREA RATIO 2.0 AT MACH NUMBERS UP TO CHOKING AND REYNOLDS NUMBERS UP TO 7.5×10^{6}. B. H. Little, Jr., and Stafford W. Wilbur. 1954. ii, 23p. diagrs., tabs. (NACA Rept. 1201. Supersedes RM L9H10; RM L9K10; RM L50C02a)

EXPERIMENTAL INVESTIGATION OF THE OSCILLATING FORCES AND MOMENTS ON A TWO-DIMENSIONAL WING EQUIPPED WITH AN OSCILLATING CIRCULAR-ARC SPOILER. Sherman A. Clevenson and John E. Tomassoni. January 1954. 20p. diagrs., photos. (NACA RM L53K18)

PRELIMINARY INVESTIGATION OF THE FLOW IN AN ANNULAR-DIFFUSER—TAILPIPE COMBINATION WITH AN ABRUPT AREA EXPANSION AND SUCTION, INJECTION, AND VORTEX-GENERATOR FLOW CONTROLS. John R. Henry and Stafford W. Wilbur. February 1954. 27p. diagrs. (NACA RM L53K30)

ON SLENDER-BODY THEORY AT TRANSONIC SPEEDS. Keith C. Harder and E. B. Klunker March 1954. 12p. (NACA RM L54A29a)

IMPINGEMENT OF CLOUD DROPLETS ON A CYLINDER AND PROCEDURE FOR MEASURING LIQUID-WATER CONTENT AND DROPLET SIZES IN SUPERCOOLED CLOUDS BY ROTATING MULTICYLINDER METHOD. R. J. Brun, W. Lewis, P. J. Perkins and J. S. Serafini. Appendix E: ALTERNATE METHOD OF REDUCING ROTATING MULTICYLINDER DATA. Paul T. Hacker. 1955. iv, 43p. diagrs., photos., tabs. (NACA Rept. 1215. Supersedes TN 2903; TN 2904; RM E53D23)

PRACTICAL CONSIDERATIONS IN SPECIFIC APPLICATIONS OF GAS-FLOW INTERFEROMETRY. Walton L. Howes and Donald R. Buchele. July 1955. ii, 95p. diagrs., photos. (NACA TN 3507)

ACOUSTIC RADIATION FROM TWO-DIMENSIONAL RECTANGULAR CUTOUTS IN AERODYNAMIC SURFACES. K. Krishnamurty, California Institute of Technology. August 1955. 33p. diagrs., photos. (NACA TN 3487)

SOME MEASUREMENTS OF FLOW IN A RECTANGULAR CUTOUT. Anatol Roshko, California Institute of Technology. August 1955. 21p. diagrs. (NACA TN 3488)

CONTRIBUTIONS ON THE MECHANICS OF BOUNDARY-LAYER TRANSITION. G. B. Schubauer and P. S. Klebanoff, National Bureau of Standards. September 1955. 31p. diagrs. (NACA TN 3489)

VISUALIZATION STUDY OF SECONDARY FLOWS IN TURBINE ROTOR TIP REGIONS. Hubert W. Allen and Milton G. Kofskey. September 1955. 33p. diagrs., photos., tab. (NACA TN 3519)

FLIGHT INVESTIGATION OF THE SURFACE-PRESSURE DISTRIBUTION AND THE FLOW FIELD AROUND A CONICAL AND TWO SPHERICAL NONROTATING FULL-SCALE PROPELLER SPINNERS. Jerome B. Hammack, Milton L. Windler, and Elwood F. Scheithauer. September 1955. 36p. diagrs., photos. (NACA TN 3535)

INTENSITY, SCALE, AND SPECTRA OF TURBULENCE IN MIXING REGION OF FREE SUBSONIC JET. James C. Laurence. September 1955. 58p. diagrs., photo., tab. (NACA TN 3561)

LAMINAR SEPARATION OVER A TRANSPIRATION-COOLED SURFACE IN COMPRESSIBLE FLOW. Morris Morduchow, Polytechnic Institute of Brooklyn. December 1955. 32p. diagrs. (NACA TN 3559)

ERROR IN AIRSPEED MEASUREMENT DUE TO THE STATIC-PRESSURE FIELD AHEAD OF AN AIRPLANE AT TRANSONIC SPEEDS. Thomas C. O'Bryan, Edward C. B. Danforth, and J. Ford Johnston. February 1956. 13p. diagrs., photos. (NACA Rept. 1239. Supersedes RM L9C25; RM L50L28; RM L52A17)

DISCHARGE COEFFICIENTS FOR COMBUSTOR-LINER AIR-ENTRY HOLES. I - CIRCULAR HOLES WITH PARALLEL FLOW. Ralph T. Dittrich and Charles C. Graves. April 1956. 39p. diagrs. (NACA TN 3663)

EXPERIMENTAL MEASUREMENTS OF FORCES AND MOMENTS ON A TWO-DIMENSIONAL OSCILLATING WING AT SUBSONIC SPEEDS. Sherman A. Clevenson and Edward Widmayer, Jr. June 1956. 28p. diagrs., tab. (NACA TN 3686. Supersedes RM L9K28a)

A STUDY OF THE HIGH-SPEED PERFORMANCE CHARACTERISTICS OF 90° BENDS IN CIRCULAR DUCTS. James T. Higginbotham, Charles C. Wood, and E. Floyd Valentine. June 1956. 28p. diagrs. (NACA TN 3696)

(1.1.2.2) MIXED FLOW

EFFECTS OF SWEEP ON CONTROLS. John G. Lowry, John A. Axelson, and Harold I. Johnson. June 3, 1948. 29p. diagrs. (NACA RM L8A28c)

RESULTS OF TWO FREE-FALL EXPERIMENTS ON FLUTTER OF THIN UNSWEPT WINGS IN THE TRANSONIC SPEED RANGE. William T. Lauten, Jr., and Herbert C. Nelson. May 8, 1951. 26p. diagrs., photo., tabs. (NACA RM L51C08)

PRESSURE MEASUREMENTS ON A BODY OF REVOLUTION IN THE LANGLEY 16-FOOT TRANSONIC TUNNEL AND A COMPARISON WITH FREE-FALL DATA. Joseph M. Hallissy, Jr. March 1952. 19p. diagrs. (NACA RM L51L07a)

TRANSONIC DRAG CHARACTERISTICS AND PRESSURE DISTRIBUTION ON THE BODY OF A WING-BODY COMBINATION CONSISTING OF A BODY OF REVOLUTION OF FINENESS RATIO 12 AND A WING HAVING SWEEPBACK OF 45°, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTIONS. Max C. Kurbjun and Jim Rogers Thompson. April 1952. 28p. diagrs., photo., tabs. (NACA RM L52B12)

PRESSURE DISTRIBUTION AND PRESSURE DRAG FOR A HEMISPHERICAL NOSE AT MACH NUMBERS 2.05, 2.54, AND 3.04. Leo T. Chauvin. December 1952. 14p. diagrs., photos. (NACA RM L52K06)

FREE-FALL MEASUREMENTS OF THE EFFECTS OF WING-BODY INTERFERENCE ON THE TRANSONIC DRAG CHARACTERISTICS OF SWEPT-WING-SLENDER-BODY CONFIGURATIONS. Max C. Kurbjun and Jim Rogers Thompson. May 1953. 34p. diagrs., photos., tabs. (NACA RM L53C31)

EXPERIMENTAL CONVECTIVE HEAT TRANSFER TO A 4-INCH AND 6-INCH HEMISPHERE AT MACH NUMBERS FROM 1.62 TO 3.04. Leo T. Chauvin and Joseph P. Maloney. February 1954. 18p. diagrs., photos. (NACA RM L53L08a)

ON SLENDER-BODY THEORY AT TRANSONIC SPEEDS. Keith C. Harder and E. B. Klunker. March 1954. 12p. (NACA RM L54A29a)

MEASUREMENTS OF NORMAL-FORCE-COEFFICIENT FLUCTUATION ON FOUR 9-PERCENT-THICK AIRFOILS HAVING DIFFERENT LOCATIONS OF MAXIMUM THICKNESS. Milton D. Humphreys. April 1954. 21p. diagrs., photos. (NACA RM L54B22)

THEORETICAL PREDICTION OF PRESSURE DISTRIBUTIONS ON NONLIFTING AIRFOILS AT HIGH SUBSONIC SPEEDS. John R. Spreiter and Alberta Alksne. 1955. iii, 42p. diagrs., photos. (NACA Rept. 1217. Supersedes TN 3096)

MEASUREMENTS OF THE EFFECTS OF FINITE SPAN ON THE PRESSURE DISTRIBUTION OVER DOUBLE-WEDGE WINGS AT MACH NUMBERS NEAR SHOCK ATTACHMENT. Walter G. Vincenti. September 1955. 50p. diagrs. (NACA TN 3522)

FLIGHT INVESTIGATION OF THE SURFACE-PRESSURE DISTRIBUTION AND THE FLOW FIELD AROUND A CONICAL AND TWO SPHERICAL NON-ROTATING FULL-SCALE PROPELLER SPINNERS. Jerome B. Hammack, Milton L. Windler, and Elwood F. Scheithauer. September 1955. 36p. diagrs., photos. (NACA TN 3535)

ERROR IN AIRSPEED MEASUREMENT DUE TO THE STATIC-PRESSURE FIELD AHEAD OF AN AIRPLANE AT TRANSONIC SPEEDS. Thomas C. O'Bryan, Edward C. B. Danforth, and J. Ford Johnston. February 1956. 13p. diagrs., photos. (NACA Rept. 1239. Supersedes RM L9C25; RM L50L28; RM L52A17)

EFFECT OF THICKNESS, CAMBER, AND THICKNESS DISTRIBUTION ON AIRFOIL CHARACTERISTICS AT MACH NUMBERS UP TO 1.0. Bernard N. Daley and Richard S. Dick. March 1956. 75p. diagrs., photos., tab. (NACA TN 3607. Supersedes RM L52G31a)

EXPERIMENTAL INVESTIGATION OF THE FLOW AROUND LIFTING SYMMETRICAL DOUBLE-WEDGE AIRFOILS AT MACH NUMBERS OF 1.30 AND 1.41. Paul B. Gooderum and George P. Wood. March 1956. 86p. diagrs., photos. (NACA TN 3626)

ON THE RANGE OF APPLICABILITY OF THE TRANSONIC AREA RULE. John R. Spreiter. May 1956. 21p. diagrs. (NACA TN 3673. Supersedes RM A54F28)

THE FLOW PAST AN UNSWEPT- AND A SWEPT-WING—BODY COMBINATION AND THEIR EQUIVALENT BODIES OF REVOLUTION AT MACH NUMBERS NEAR 1.0. Walter F. Lindsey. June 1956. 18p. diagrs., photos. (NACA TN 3703. Supersedes RM L54A28a)

(1.1.2.3) SUPERSONIC FLOW

EXPERIMENTAL INVESTIGATION AT SUPERSONIC SPEEDS OF TWIN-SCOOP DUCT INLETS OF EQUAL AREA. I. - AN INLET ENCLOSING 61.5 PERCENT OF THE MAXIMUM CIRCUMFERENCE OF THE FOREBODY. Wallace F. Davis and David L. Goldstein. January 21, 1948. 16p. diagrs., photos. (NACA RM A7J27)

EXPERIMENTAL INVESTIGATION AT SUPERSONIC SPEEDS OF TWIN-SCOOP DUCT INLETS OF EQUAL AREA. II - EFFECTS OF SLOTS UPON AN INLET ENCLOSING 61.5 PERCENT OF THE MAXIMUM CIRCUMFERENCE OF THE FOREBODY. Wallace F. Davis and David L. Goldstein. June 9, 1948. 15p. diagrs., photos. (NACA RM A8C11)

AERODYNAMIC INVESTIGATION OF A PARABOLIC BODY OF REVOLUTION AT MACH NUMBER OF 1.92 AND SOME EFFECTS OF AN ANNULAR JET EXHAUSTING FROM THE BASE. Eugene S. Love. February 8, 1950. 75p. diagrs., photos., tab. (NACA RM L9K09)

AERODYNAMIC CHARACTERISTICS OF NACA RM-10 MISSILE IN 8- BY 6-FOOT SUPERSONIC WIND TUNNEL AT MACH NUMBERS FROM 1.49 TO 1.98. II - PRESENTATION AND ANALYSIS OF FORCE MEASUREMENTS. Fred T. Esenwein, Leonard J. Obery, and Carl F. Schueller. July 21, 1950. 34p. diagrs., photo. (NACA RM E50D28)

AERODYNAMIC CHARACTERISTICS OF NACA RM-10 MISSILE IN 8- BY 6-FOOT SUPERSONIC WIND TUNNEL AT MACH NUMBERS FROM 1.49 TO 1.98. III - ANALYSIS OF FORCE DISTRIBUTION AT ANGLE OF ATTACK (STABILIZING FINS REMOVED). Roger W. Luidens and Paul C. Simon. December 12, 1950. 26p. diagrs. (NACA RM E50I19)

SOME EXPERIMENTS ON THE FLUTTER OF SWEPTBACK CANTILEVER WING MODELS AT MACH NUMBER 1.3. W. J. Tuovila. March 15, 1951. 10p. diagrs., tab. (NACA RM L51A11)

AN INVESTIGATION OF FOUR WINGS OF SQUARE PLAN FORM AT A MACH NUMBER OF 6.86 IN THE LANGLEY 11-INCH HYPERSONIC TUNNEL. Charles H. McLellan, Mitchel H. Bertram, and John A. Moore. June 1951. 47p. diagrs., photos. (NACA RM L51D17)

FLOW SEPARATION AHEAD OF A BLUNT AXIALLY SYMMETRIC BODY AT MACH NUMBERS 1.76 TO 2.10. W. E. Moeckel. December 1951. 12p. diagrs., photos. (NACA RM E51I25)

PRESSURE MEASUREMENTS ON A BODY OF REVOLUTION IN THE LANGLEY 16-FOOT TRANSONIC TUNNEL AND A COMPARISON WITH FREE-FALL DATA. Joseph M. Hallissy, Jr. March 1952. 19p. diagrs. (NACA RM L51L07a)

TRANSONIC DRAG CHARACTERISTICS AND PRESSURE DISTRIBUTION ON THE BODY OF A WING-BODY COMBINATION CONSISTING OF A BODY OF REVOLUTION OF FINENESS RATIO 12 AND A WING HAVING SWEEPBACK OF 45°, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTIONS. Max C. Kurbjun and Jim Rogers Thompson. April 1952. 28p. diagrs., photo., tabs. (NACA RM L52B12)

SOME WIND-TUNNEL RESULTS OF AN INVESTIGATION OF THE FLUTTER OF SWEPTBACK- AND TRIANGULAR-WING MODELS AT MACH NUMBER 1.3. W. J. Tuovila. May 1952. 12p. diagrs., tab. (NACA RM L52C13)

PRELIMINARY DATA AT A MACH NUMBER OF 2.40 OF THE CHARACTERISTICS OF FLAP-TYPE CONTROLS EQUIPPED WITH PLAIN OVERHANG BALANCES. James N. Mueller and K. R. Czarnecki. September 1952. 43p. diagrs., photos. (NACA RM L52F10)

INVESTIGATIONS AT SUPERSONIC SPEEDS OF THE BASE PRESSURE ON BODIES OF REVOLUTION WITH AND WITHOUT SWEPTBACK STABILIZING FINS. Eugene S. Love and Robert M. O'Donnell. December 1952. 66p. diagrs., photos. (NACA RM L52J21a)

INVESTIGATION OF THE AERODYNAMIC CHARACTERISTICS OF THE NACA RM-10 MISSILE (WITH FINS) AT A MACH NUMBER OF 1.62 IN THE LANGLEY 9-INCH SUPERSONIC TUNNEL. Donald E. Coletti. December 1952. 21p. diagrs. (NACA RM L52J23a)

PRESSURE DISTRIBUTION AND PRESSURE DRAG FOR A HEMISPHERICAL NOSE AT MACH NUMBERS 2.05, 2.54, AND 3.04. Leo T. Chauvin. December 1952. 14p. diagrs., photos. (NACA RM L52K06)

INVESTIGATIONS OF THE DAMPING IN ROLL OF SWEPT AND TAPERED WINGS AT SUPERSONIC SPEEDS. Russell W. McDearmon and Harry S. Heinke, Jr. March 1953. 35p. diagrs., photos., tab. (NACA RM L53A13)

AN EXPERIMENTAL INVESTIGATION OF THE ZERO-LIFT-DRAG CHARACTERISTICS OF SYMMETRICAL BLUNT-TRAILING-EDGE AIRFOILS AT MACH NUMBERS FROM 2.7 TO 5.0. Clarence A. Syvertson and Hermilo R. Gloria. April 1953. 31p. diagrs., photos., tabs. (NACA RM A53B02)

THE BASE PRESSURE AT SUPERSONIC SPEEDS ON TWO-DIMENSIONAL AIRFOILS AND BODIES OF REVOLUTION (WITH AND WITHOUT FINS) HAVING TURBULENT BOUNDARY LAYERS. Eugene S. Love. April 1953. 65p. diagrs., photos. (NACA RM L53C02)

FREE-FALL MEASUREMENTS OF THE EFFECTS OF WING-BODY INTERFERENCE ON THE TRANSONIC DRAG CHARACTERISTICS OF SWEPT-WING-SLENDER-BODY CONFIGURATIONS. Max C. Kurbjun and Jim Rogers Thompson. May 1953. 34p. diagrs., photos., tabs. (NACA RM L53C31)

SLOTTED-BOUNDARY INTERFERENCE EFFECTS ON WEDGE AIRFOILS AT LOW SUPERSONIC MACH NUMBERS. William J. Nelson and Allen R. Vick. July 1953. 27p. diagrs., photos. (NACA RM L53F11)

THEORY OF WING-BODY DRAG AT SUPERSONIC SPEEDS. Robert T. Jones. September 1953. 11p. diagrs. (NACA RM A53H18a)

INVESTIGATION OF REYNOLDS NUMBER EFFECTS FOR A SERIES OF CONE-CYLINDER BODIES AT MACH NUMBERS OF 1.62, 1.93, AND 2.41. Carl E. Grigsby and Edmund L. Ogburn. October 1953. 20p. diagrs., photos. (NACA RM L53H21)

EFFECT OF VARIABLE VISCOSITY AND THERMAL CONDUCTIVITY ON HIGH-SPEED SLIP FLOW BETWEEN CONCENTRIC CYLINDERS. T. C. Lin and R. E. Street, University of Washington. 1954. ii, 36p. diagrs. (NACA Rept. 1175. Formerly TN 2895)

SUPERSONIC FLOW PAST OSCILLATING AIRFOILS INCLUDING NONLINEAR THICKNESS EFFECTS. Milton D. Van Dyke. 1954. ii, 17p. diagrs. (NACA Rept. 1183. Formerly TN 2982)

A STUDY OF HYPERSONIC SMALL-DISTURBANCE THEORY. Milton D. Van Dyke. 1954. ii, 21p. diagrs. (NACA Rept. 1194. Formerly TN 3173)

A SUMMARY OF INFORMATION ON SUPPORT INTERFERENCE AT TRANSONIC AND SUPERSONIC SPEEDS. Eugene S. Love. January 1954. 26p. diagrs. (NACA RM L53K12)

EXPERIMENTAL CONVECTIVE HEAT TRANSFER TO A 4-INCH AND 6-INCH HEMISPHERE AT MACH NUMBERS FROM 1.62 TO 3.04. Leo T. Chauvin and Joseph P. Maloney. February 1954. 18p. diagrs., photos. (NACA RM L53L08a)

AERODYNAMIC CHARACTERISTICS OF A CIRCULAR CYLINDER AT MACH NUMBER 6.86 AND ANGLES OF ATTACK UP TO 90^{o}. Jim A. Penland. March 1954. 30p. diagrs., photos. (NACA RM L54A14)

ON SLENDER-BODY THEORY AT TRANSONIC SPEEDS. Keith C. Harder and E. B. Klunker. March 1954. 12p. (NACA RM L54A29a)

AN EXPERIMENTAL INVESTIGATION OF THE TRANSONIC-FLOW-GENERATION AND SHOCK-WAVE-REFLECTION CHARACTERISTICS OF A TWO-DIMENSIONAL WIND TUNNEL WITH 17-PERCENT-OPEN PERFORATED WALLS. Don D. Davis, Jr., Thomas B. Sellers, and George M. Stokes. April 1954. 40p. diagrs., photos. (NACA RM L54B15a)

DRAG AND HEAT TRANSFER ON A PARABOLIC BODY OF REVOLUTION (NACA RM-10) IN FREE FLIGHT TO MACH NUMBER 2 WITH BOTH CONSTANT AND VARYING REYNOLDS NUMBER AND HEATING EFFECTS ON TURBULENT SKIN FRICTION. Joseph P. Maloney. June 1954. 34p. diagrs., photo. (NACA RM L54D06)

AN INVESTIGATION OF THE CHARACTERISTICS OF THE NACA RM-10 (WITH AND WITHOUT FINS) IN THE LANGLEY 11-INCH HYPERSONIC TUNNEL AT A MACH NUMBER OF 6.9. William D. McCauley and William V. Feller. November 1954. 37p. diagrs., photos. (NACA RM L54I03)

AN INVESTIGATION OF THE MAXIMUM LIFT OF WINGS AT SUPERSONIC SPEEDS. James J. Gallagher and James N. Mueller. 1955. ii, 28p. diagrs., photos., tabs. (NACA Rept. 1227. Supersedes RM L7J10)

SHOCK-TURBULENCE INTERACTION AND THE GENERATION OF NOISE. H. S. Ribner. 1955. iii, 19p. diagrs., tab. (NACA Rept. 1233. Supersedes TN 3255)

ARRANGEMENT OF FUSIFORM BODIES TO REDUCE THE WAVE DRAG AT SUPERSONIC SPEEDS. Morris D. Friedman and Doris Cohen. 1955. ii, 8p. diagrs. (NACA Rept. 1236. Supersedes RM A51I20; TN 3345)

A UNIFIED TWO-DIMENSIONAL APPROACH TO THE CALCULATION OF THREE-DIMENSIONAL HYPERSONIC FLOWS, WITH APPLICATION TO BODIES OF REVOLUTION. A. J. Eggers, Jr. and Raymond C. Savin. 1955. ii, 27p. diagrs., tab. (NACA Rept. 1249. Supersedes TN 2811)

EXPLORATORY INVESTIGATION OF FLOW IN THE SEPARATED REGION AHEAD OF TWO BLUNT BODIES AT MACH NUMBER 2. Harry Bernstein and William E. Brunk. June 1955. 27p. diagrs., photos. (NACA RM E55D07b)

TURBULENT-HEAT-TRANSFER MEASUREMENTS AT A MACH NUMBER OF 1.62. Maurice J. Brevoort and Bernard Rashis. June 1955. 15p. diagrs., tab. (NACA TN 3461)

CALCULATION OF THE SUPERSONIC PRESSURE DISTRIBUTION ON A SINGLE-CURVED TAPERED WING IN REGIONS NOT INFLUENCED BY THE ROOT OR TIP. Walter G. Vincenti and Newman H. Fisher, Jr. June 1955. 32p. diagrs. (NACA TN 3499)

A LOW-DENSITY WIND-TUNNEL STUDY OF SHOCK-WAVE STRUCTURE AND RELAXATION PHENOMENA IN GASES. F. S. Sherman, University of California. July 1955. 83p. diagrs., photos., 2 tabs. (NACA TN 3298)

AERODYNAMICS OF A RECTANGULAR WING OF INFINITE ASPECT RATIO AT HIGH ANGLES OF ATTACK AND SUPERSONIC SPEEDS. John C. Martin and Frank S. Malvestuto, Jr. July 1955. 114p. diagrs., tab. (NACA TN 3421)

(1) AERODYNAMICS

THEORETICAL INVESTIGATION OF FLUTTER OF TWO-DIMENSIONAL FLAT PANELS WITH ONE SURFACE EXPOSED TO SUPERSONIC POTENTIAL FLOW. Herbert C. Nelson and Herbert J. Cunningham. July 1955. 60p. diagrs., tab. (NACA TN 3465)

FLOW STUDIES ON FLAT-PLATE DELTA WINGS AT SUPERSONIC SPEED. William H. Michael, Jr. July 1955. 40p. diagrs., photos. (NACA TN 3472)

PRACTICAL CONSIDERATIONS IN SPECIFIC APPLICATIONS OF GAS-FLOW INTERFEROMETRY. Walton L. Howes and Donald R. Buchele. July 1955. ii, 95p. diagrs., photos. (NACA TN 3507)

A STUDY OF BOUNDARY-LAYER TRANSITION AND SURFACE TEMPERATURE DISTRIBUTIONS AT MACH 3.12. Paul F. Brinich. July 1955. 39p. diagrs., photo. (NACA TN 3509)

ON BOATTAIL BODIES OF REVOLUTION HAVING MINIMUM WAVE DRAG. Keith C. Harder and Conrad Rennemann, Jr. August 1955. 28p. diagrs., tab. (NACA TN 3478)

ACOUSTIC RADIATION FROM TWO-DIMENSIONAL RECTANGULAR CUTOUTS IN AERODYNAMIC SURFACES. K. Krishnamurty, California Institute of Technology. August 1955. 33p. diagrs., photos. (NACA TN 3487)

FLIGHT INVESTIGATION OF THE SURFACE-PRESSURE DISTRIBUTION AND THE FLOW FIELD AROUND A CONICAL AND TWO SPHERICAL NON-ROTATING FULL-SCALE PROPELLER SPINNERS. Jerome B. Hammack, Milton L. Windler, and Elwood F. Scheithauer. September 1955. 36p. diagrs., photos. (NACA TN 3535)

AN APPROXIMATE SOLUTION FOR AXIALLY SYMMETRIC FLOW OVER A CONE WITH AN ATTACHED SHOCK WAVE. Richard A. Hord. October 1955. 32p. diagrs. (NACA TN 3485)

THE PROPER COMBINATION OF LIFT LOADING FOR LEAST DRAG ON A SUPERSONIC WING. Frederick C. Grant. October 1955. 21p. diagrs. (NACA TN 3533)

LAMINAR SEPARATION OVER A TRANSPIRATION-COOLED SURFACE IN COMPRESSIBLE FLOW. Morris Morduchow, Polytechnic Institute of Brooklyn. December 1955. 32p. diagrs. (NACA TN 3559)

PRESSURE RISE ASSOCIATED WITH SHOCK-INDUCED BOUNDARY-LAYER SEPARATION. Eugene S. Love. December 1955. 32p. diagrs. (NACA TN 3601)

A SECOND-ORDER SHOCK-EXPANSION METHOD APPLICABLE TO BODIES OF REVOLUTION NEAR ZERO LIFT. Clarence A. Syvertson and David H. Dennis. January 1956. 57p. diagrs., tabs. (NACA TN 3527)

INVESTIGATION OF THE EFFECT OF SHORT FIXED DIFFUSERS ON STARTING BLOWDOWN JETS IN THE MACH NUMBER RANGE FROM 2.7 TO 4.5. John A. Moore. January 1956. 32p. diagrs., photos. (NACA TN 3545)

DESIGN CRITERIA FOR AXISYMMETRIC AND TWO-DIMENSIONAL SUPERSONIC INLETS AND EXITS. James F. Connors and Rudolph C. Meyer. January 1956. 42p. diagrs., tabs. (NACA TN 3589)

FLOW STUDIES ON DROOPED-LEADING-EDGE DELTA WINGS AT SUPERSONIC SPEED. William H. Michael, Jr. January 1956. 29p. diagrs., photos. (NACA TN 3614)

MINIMUM WAVE DRAG FOR ARBITRARY ARRANGEMENTS OF WINGS AND BODIES. Robert T. Jones. February 1956. 11p. diagrs. (NACA TN 3530)

TABULATION OF THE f_λ FUNCTIONS WHICH OCCUR IN THE AERODYNAMIC THEORY OF OSCILLATING WINGS IN SUPERSONIC FLOW. Vera Huckel. February 1956. 59p. tab. (NACA TN 3606)

BODIES OF REVOLUTION HAVING MINIMUM DRAG AT HIGH SUPERSONIC AIRSPEEDS. A. J. Eggers, Jr., Meyer M. Resnikoff, and David H. Dennis. February 1956. 38p. diagrs., photos. (NACA TN 3666. Supersedes RM A51K27; A52D24)

A FLAT WING WITH SHARP EDGES IN A SUPERSONIC STREAM. A. E. Donov. March 1956. 48p. diagrs. (NACA TM 1394. Trans. from Akademiia NAUK SSSR, Izvestiia, 1939, p. 603-626)

A METHOD FOR CALCULATING THE CONTOUR OF BODIES OF REVOLUTION WITH A PRESCRIBED PRESSURE GRADIENT AT SUPERSONIC SPEED WITH EXPERIMENTAL VERIFICATION. Paige B. Burbank. March 1956. 64p. diagrs., photos., tabs. (NACA TN 3555)

LINEARIZED LIFTING-SURFACE AND LIFTING-LINE EVALUATIONS OF SIDEWASH BEHIND ROLLING TRIANGULAR WINGS AT SUPERSONIC SPEEDS. Percy J. Bobbitt. March 1956. 63p. diagrs. (NACA TN 3609)

THEORETICAL ANALYSIS OF LINKED LEADING-EDGE AND TRAILING-EDGE FLAP-TYPE CONTROLS AT SUPERSONIC SPEEDS. E. Carson Yates, Jr. March 1956. 40p. diagrs., tab. (NACA TN 3617)

EXPERIMENTAL INVESTIGATION OF THE FLOW AROUND LIFTING SYMMETRICAL DOUBLE-WEDGE AIRFOILS AT MACH NUMBERS OF 1.30 AND 1.41. Paul B. Gooderum and George P. Wood. March 1956. 86p. diagrs., photos. (NACA TN 3626)

SOME EFFECTS OF BLUNTNESS ON BOUNDARY-LAYER TRANSITION AND HEAT TRANSFER AT SUPERSONIC SPEEDS. W. E. Moeckel. March 1956. 43p. diagrs. (NACA TN 3653)

EFFECT OF LEADING-EDGE GEOMETRY ON BOUNDARY-LAYER TRANSITION AT MACH 3.1. Paul F. Brinich. March 1956. 44p. diagrs., tabs. (NACA TN 3659)

CALCULATIONS OF THE RATE OF THERMAL DISSOCIATION OF AIR BEHIND NORMAL SHOCK WAVES AT MACH NUMBERS OF 10, 12, AND 14. George P. Wood. April 1956. 40p. diagrs., tabs. (NACA TN 3634)

FLAT PLATE CASCADES AT SUPERSONIC SPEED. (Ebene Plattengitter bei Überschallgeschwindigkeit). Rashad M. El Badrawy. May 1956. iii, 130p. diagrs., photos., tabs. (NACA TM 1369. Trans. of Eidgenössische Technische Hochschule Zürich. Institut für Aerodynamik. Mitteilungen 19)

EXPLORATORY INVESTIGATION OF BOUNDARY-LAYER TRANSITION ON A HOLLOW CYLINDER AT A MACH NUMBER OF 6.9. Mitchel H. Bertram. May 1956. 38p. diagrs., photo., tab. (NACA TN 3546)

INVESTIGATION AT SUPERSONIC SPEEDS OF THE VARIATION WITH REYNOLDS NUMBER AND MACH NUMBER OF THE TOTAL, BASE, AND SKIN-FRICTION DRAG OF SEVEN BOATTAIL BODIES OF REVOLUTION DESIGNED FOR MINIMUM WAVE DRAG. August F. Bromm, Jr. and Julia M. Goodwin. June 1956. 20p. diagrs., photo. (NACA TN 3708. Supersedes RM L53I29b)

THEORETICAL WAVE DRAG OF SHROUDED AIRFOILS AND BODIES. Paul F. Byrd. June 1956. 40p. diagrs. (NACA TN 3718)

AN EVALUATION OF FOUR EXPERIMENTAL METHODS FOR MEASURING MEAN PROPERTIES OF A SUPERSONIC TURBULENT BOUNDARY LAYER. George J. Nothwang. June 1956. 34p. diagrs., photos. (NACA TN 3721)

(1.1.3)
VISCOUS FLOW

CHARACTERISTICS OF FLOW OVER INCLINED BODIES OF REVOLUTION. H. Julian Allen and Edward W. Perkins. March 5, 1951. 47p. diagrs., photos. (NACA RM A50L07)

AERODYNAMIC CHARACTERISTICS OF THE NACA RM-10 RESEARCH MISSILE IN THE AMES 1- BY 3-FOOT SUPERSONIC WIND TUNNEL NO. 2 - PRESSURE AND FORCE MEASUREMENTS AT MACH NUMBERS OF 1.52 AND 1.98. Edward W. Perkins, Forrest E. Gowen and Leland H. Jorgensen. September 1951. 37p. diagrs. (NACA RM A51G13)

FLOW SEPARATION AHEAD OF A BLUNT AXIALLY SYMMETRIC BODY AT MACH NUMBERS 1.76 TO 2.10. W. E. Moeckel. December 1951. 12p. diagrs., photos. (NACA RM E51I25)

PRELIMINARY DATA AT A MACH NUMBER OF 2.40 OF THE CHARACTERISTICS OF FLAP-TYPE CONTROLS EQUIPPED WITH PLAIN OVERHANG BALANCES. James N. Mueller and K. R. Czarnecki. September 1952. 43p. diagrs., photos. (NACA RM L52F10)

EFFECT OF VARIABLE VISCOSITY AND THERMAL CONDUCTIVITY ON HIGH-SPEED SLIP FLOW BETWEEN CONCENTRIC CYLINDERS. T. C. Lin and R. E. Street, University of Washington. 1954. ii, 36p. diagrs. (NACA Rept. 1175. Formerly TN 2895)

ON THE DEVELOPMENT OF TURBULENT WAKES FROM VORTEX STREETS. Anatol Roshko, California Institute of Technology. 1954. ii, 25p. diagrs., photos., 3 tabs. (NACA Rept. 1191. Formerly TN 2913)

AN EXPERIMENTAL INVESTIGATION OF THE TRANSONIC-FLOW-GENERATION AND SHOCK-WAVE-REFLECTION CHARACTERISTICS OF A TWO-DIMENSIONAL WIND TUNNEL WITH 17-PERCENT-OPEN PERFORATED WALLS. Don D. Davis, Jr., Thomas B. Sellers, and George M. Stokes. April 1954. 40p. diagrs., photos. (NACA RM L54B15a)

DRAG MEASUREMENTS ON A 1/6-SCALE, FINLESS, STING-MOUNTED NACA RM-10 MISSILE IN FLIGHT AT MACH NUMBERS FROM 1.1 TO 4.04 SHOWING SOME REYNOLDS NUMBER AND HEATING EFFECTS. Robert O. Piland. October 1954. 20p. diagrs., photos. (NACA RM L54H09)

MEASUREMENTS OF TURBULENT SKIN FRICTION ON A FLAT PLATE AT TRANSONIC SPEEDS. Raimo J(aakko) Hakkinen, California Institute of Technology. September 1955. 41p. diagrs., photo., tabs. (NACA TN 3486)

VISUALIZATION STUDY OF SECONDARY FLOWS IN TURBINE ROTOR TIP REGIONS. Hubert W. Allen and Milton G. Kofskey. September 1955. 33p. diagrs., photos., tab. (NACA TN 3519)

VARIATION OF BOUNDARY-LAYER TRANSITION WITH HEAT TRANSFER ON TWO BODIES OF REVOLUTION AT A MACH NUMBER OF 3.12. John R. Jack and N. S. Diaconis. September 1955. 16p. diagrs., photos. (NACA TN 3562)

AVERAGING OF PERIODIC PRESSURE PULSATIONS BY A TOTAL-PRESSURE PROBE. R. C. Johnson. October 1955. 30p. diagrs., photo., tabs. (NACA TN 3568)

BURNING VELOCITIES OF VARIOUS PREMIXED TURBULENT PROPANE FLAMES ON OPEN BURNERS. Paul Wagner. October 1955. 32p. diagrs., photos., tab. (NACA TN 3575)

ON THE PERMEABILITY OF POROUS MATERIALS. E. Carson Yates, Jr. January 1956. 31p. diagrs. (NACA TN 3596)

CROSS FLOWS IN LAMINAR INCOMPRESSIBLE BOUNDARY LAYERS. Arthur G. Hansen and Howard Z. Herzig. February 1956. 50p. diagrs., photos., tabs. (NACA TN 3651)

FORMATION OF A VORTEX AT THE EDGE OF A PLATE. (Ausbildung eines Wirbels an der Kante einer Platte). Leo Anton. March 1956. 36p. diagrs. (NACA TM 1398. Trans. from Ingenieur-Archiv, v. 10, 1939, p. 411-427)

A METHOD FOR CALCULATING THE CONTOUR OF BODIES OF REVOLUTION WITH A PRESCRIBED PRESSURE GRADIENT AT SUPERSONIC SPEED WITH EXPERIMENTAL VERIFICATION. Paige B. Burbank. March 1956. 64p. diagrs., photos., tabs. (NACA TN 3555)

SOME EFFECTS OF BLUNTNESS ON BOUNDARY-LAYER TRANSITION AND HEAT TRANSFER AT SUPERSONIC SPEEDS. W. E. Moeckel. March 1956. 43p. diagrs. (NACA TN 3653)

EFFECT OF LEADING-EDGE GEOMETRY ON BOUNDARY-LAYER TRANSITION AT MACH 3.1. Paul F. Brinich. March 1956. 44p. diagrs., tabs. (NACA TN 3659)

BOUNDARY LAYER. (Pogranichnyi sloi). L. G. Loitsianskii. May 1956. 29p. (NACA TM 1400. Trans. from Mechanics in the U.S.S.R. over Thirty Years, 1917-1947, p. 300-320)

COMPARISON OF THE EXPERIMENTAL AND THEORETICAL DISTRIBUTIONS OF LIFT ON A SLENDER INCLINED BODY OF REVOLUTION AT $M = 2^1$. Edward W. Perkins and Donald M. Kuehn. May 1956. 39p. diagrs., photos., tabs. (NACA TN 3715. Supersedes RM A53E01)

COMPARISON OF EXPERIMENTAL AND THEORETICAL NORMAL-FORCE DISTRIBUTIONS (INCLUDING REYNOLDS NUMBER EFFECTS) ON AN OGIVE-CYLINDER BODY AT MACH NUMBER 1.98. Edward W. Perkins and Leland H. Jorgensen. May 1956. 50p. diagrs., tab. (NACA TN 3716. Supersedes RM A54H23)

PRELIMINARY REPORT ON A STUDY OF SEPARATED FLOWS IN SUPERSONIC AND SUBSONIC STREAMS. Dean R. Chapman, Donald M. Kuehn, and Howard K. Larson. June 1956. 15p. diagrs., photos. (NACA RM A55L14)

SPACE HEATING RATES FOR SOME PREMIXED TURBULENT PROPANE-AIR FLAMES. Burton D. Fine and Paul Wagner. June 1956. 26p. diagrs., tab. (NACA TN 3277)

APPLICATION OF SCATTERING THEORY TO THE MEASUREMENT OF TURBULENT DENSITY FLUCTUATIONS BY AN OPTICAL METHOD. Howard A. Stine and Warren Winovich. June 1956. 21p. diagrs., (NACA TN 3719)

(1.1.3.1) LAMINAR FLOW

AN INVESTIGATION OF FOUR WINGS OF SQUARE PLAN FORM AT A MACH NUMBER OF 6.86 IN THE LANGLEY 11-INCH HYPERSONIC TUNNEL. Charles H. McLellan, Mitchel H. Bertram, and John A. Moore. June 1951. 47p. diagrs., photos. (NACA RM L51D17)

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EXACT SOLUTIONS OF LAMINAR-BOUNDARY-LAYER EQUATIONS WITH CONSTANT PROPERTY VALUES FOR POROUS WALL WITH VARIABLE TEMPERATURE. Patrick L. Donoughe and John N. B. Livingood. 1955. ii, 21p. diagrs., tabs. (NACA Rept. 1229. Supersedes TN 3151)

AN INVESTIGATION OF THE EFFECTS OF HEAT TRANSFER ON BOUNDARY-LAYER TRANSITION ON A PARABOLIC BODY OF REVOLUTION (NACA RM-10) AT A MACH NUMBER OF 1.61. K. R. Czarnecki and Archibald R. Sinclair. 1955. 11p. diagrs., photos., tab. (NACA Rept. 1240. Supersedes TN 3165 and TN 3166)

UNSTABLE CONVECTION IN VERTICAL CHANNELS WITH HEATING FROM BELOW, INCLUDING EFFECTS OF HEAT SOURCES AND FRICTIONAL HEATING. Simon Ostrach. July 1955. 38p. diagrs., 3 tabs. (NACA TN 3458)

PRACTICAL CONSIDERATIONS IN SPECIFIC APPLICATIONS OF GAS-FLOW INTERFEROMETRY. Walton L. Howes and Donald R. Buchele. July 1955. ii, 95p. diagrs., photos. (NACA TN 3507)

LAMINAR FREE CONVECTION ON A VERTICAL PLATE WITH PRESCRIBED NONUNIFORM WALL HEAT FLUX OR PRESCRIBED NONUNIFORM WALL TEMPERATURE. E. M. Sparrow. July 1955. 34p. diagrs. (NACA TN 3508)

A STUDY OF BOUNDARY-LAYER TRANSITION AND SURFACE TEMPERATURE DISTRIBUTIONS AT MACH 3.12. Paul F. Brinich. July 1955. 39p. diagrs., photo. (NACA TN 3509)

HEAT TRANSFER AT THE FORWARD STAGNATION POINT OF BLUNT BODIES. Eli Reshotko and Clarence B. Cohen. July 1955. 17p. diagrs. (NACA TN 3513)

CONTRIBUTIONS ON THE MECHANICS OF BOUNDARY-LAYER TRANSITION. G. B. Schubauer and P. S. Klebanoff, National Bureau of Standards. September 1955. 31p. diagrs. (NACA TN 3489)

AN EXPERIMENTAL INVESTIGATION OF REGIONS OF SEPARATED LAMINAR FLOW. Donald E. Gault. September 1955. 65p. diagrs., photos., 4 tabs. (NACA TN 3505)

COMPRESSIBLE LAMINAR BOUNDARY LAYER AND HEAT TRANSFER FOR UNSTEADY MOTIONS OF A FLAT PLATE. Simon Ostrach. November 1955. 26p. diagrs., tab. (NACA TN 3569)

LIFT HYSTERESIS AT STALL AS AN UNSTEADY BOUNDARY-LAYER PHENOMENON. Franklin K. Moore. November 1955. 32p. diagrs., tab. (NACA TN 3571)

LAMINAR SEPARATION OVER A TRANSPIRATION-COOLED SURFACE IN COMPRESSIBLE FLOW. Morris Morduchow, Polytechnic Institute of Brooklyn. December 1955. 32p. diagrs. (NACA TN 3559)

SUMMARY OF LAMINAR-BOUNDARY-LAYER SOLUTIONS FOR WEDGE-TYPE FLOW OVER CONVECTION- AND TRANSPIRATION-COOLED SURFACES. John N. B. Livingood and Patrick L. Donoughe. December 1955. 33p. diagrs., tabs. (NACA TN 3588)

PRESSURE RISE ASSOCIATED WITH SHOCK-INDUCED BOUNDARY-LAYER SEPARATION. Eugene S. Love. December 1955. 32p. diagrs. (NACA TN 3601)

LAMINAR FLOW ABOUT A ROTATING BODY OF REVOLUTION IN AN AXIAL AIRSTREAM. (Die laminare Strömung um einen axial angeströmten rotierreden Drehkörper). H. Schlichting. (Abstract of paper presented at the Eighth International Mechanics Congress, Istanbul, August 27, 1952). February 1956. 43p. diagrs., photo. (NACA TM 1415. Trans. from Ingenieur-Archiv, v. 21, no. 4, 1953, p. 227-244)

CROSS FLOWS IN LAMINAR INCOMPRESSIBLE BOUNDARY LAYERS. Arthur G. Hansen and Howard Z. Herzig. February 1956. 50p. diagrs., photos., tabs. (NACA TN 3651)

EXPLORATORY INVESTIGATION OF BOUNDARY-LAYER TRANSITION ON A HOLLOW CYLINDER AT A MACH NUMBER OF 6.9. Mitchel H. Bertram. May 1956. 38p. diagrs., photo., tab. (NACA TN 3546)

INVESTIGATION OF BOUNDARY-LAYER TRANSITION ON 10° CONE IN LANGLEY 4- BY 4-FOOT SUPERSONIC PRESSURE TUNNEL AT MACH NUMBERS OF 1.41, 1.61, AND 2.01. Archibald R. Sinclair and K. R. Czarnecki. May 1956. 17p. diagrs., photos. (NACA TN 3648)

BOUNDARY LAYER BEHIND SHOCK OR THIN EXPANSION WAVE MOVING INTO STATIONARY FLUID. Harold Mirels. May 1956. i, 53p. diagrs., tabs. (NACA TN 3712)

INVESTIGATION AT SUPERSONIC SPEEDS OF THE VARIATION WITH REYNOLDS NUMBER AND MACH NUMBER OF THE TOTAL, BASE, AND SKIN-FRICTION DRAG OF SEVEN BOATTAIL BODIES OF REVOLUTION DESIGNED FOR MINIMUM WAVE DRAG. August F. Bromm, Jr. and Julia M. Goodwin. June 1956. 20p. diagrs., photo. (NACA TN 3708. Supersedes RM L53I29b)

(1.1.3.2) TURBULENT FLOW

INVESTIGATIONS AT SUPERSONIC SPEEDS OF THE BASE PRESSURE ON BODIES OF REVOLUTION WITH AND WITHOUT SWEPTBACK STABILIZING FINS. Eugene S. Love and Robert M. O'Donnell. December 1952. 66p. diagrs., photos. (NACA RM L52J21a)

THE BASE PRESSURE AT SUPERSONIC SPEEDS ON TWO-DIMENSIONAL AIRFOILS AND BODIES OF REVOLUTION (WITH AND WITHOUT FINS) HAVING TURBULENT BOUNDARY LAYERS. Eugene S. Love. April 1953. 65p. diagrs., photos. (NACA RM L53C02)

FLOW DIFFUSION IN A CONSTANT-DIAMETER DUCT DOWNSTREAM OF AN ABRUPTLY TERMINATED CENTER BODY. Charles C. Wood and James T. Higginbotham. July 1953. 27p. diagrs. (NACA RM L53D23)

(1) AERODYNAMICS

INVESTIGATION OF REYNOLDS NUMBER EFFECTS FOR A SERIES OF CONE-CYLINDER BODIES AT MACH NUMBERS OF 1.62, 1.93, AND 2.41. Carl E. Grigsby and Edmund L. Ogburn. October 1953. 20p. diagrs., photos. (NACA RM L53H21)

THE STRUCTURE OF TURBULENCE IN FULLY DEVELOPED PIPE FLOW. John Laufer, National Bureau of Standards. 1954. ii, 18p. diagrs. (NACA Rept. 1174. Formerly TN 2954)

PERFORMANCE AND BOUNDARY-LAYER DATA FROM 12° AND 23° CONICAL DIFFUSERS OF AREA RATIO 2.0 AT MACH NUMBERS UP TO CHOKING AND REYNOLDS NUMBERS UP TO 7.5×10^6. B. H. Little, Jr., and Stafford W. Wilbur. 1954. ii, 23p. diagrs., tabs. (NACA Rept. 1201. Supersedes RM L9H10; RM L9K10; RM L50C02a)

PRELIMINARY INVESTIGATION OF THE FLOW IN AN ANNULAR-DIFFUSER—TAILPIPE COMBINATION WITH AN ABRUPT AREA EXPANSION AND SUCTION, INJECTION, AND VORTEX-GENERATOR FLOW CONTROLS. John R. Henry and Stafford W. Wilbur. February 1954. 27p. diagrs. (NACA RM L53K30)

SOME OBSERVATIONS OF SHOCK-INDUCED TURBULENT SEPARATION ON SUPERSONIC DIFFUSERS. T. J. Nussdorfer. May 1954. 14p. diagrs., photos. (NACA RM E51L26)

DRAG AND HEAT TRANSFER ON A PARABOLIC BODY OF REVOLUTION (NACA RM-10) IN FREE FLIGHT TO MACH NUMBER 2 WITH BOTH CONSTANT AND VARYING REYNOLDS NUMBER AND HEATING EFFECTS ON TURBULENT SKIN FRICTION. Joseph P. Maloney. June 1954. 34p. diagrs., photo. (NACA RM L54D06)

ANALYSIS OF TURBULENT HEAT TRANSFER, MASS TRANSFER, AND FRICTION IN SMOOTH TUBES AT HIGH PRANDTL AND SCHMIDT NUMBERS. Robert G. Deissler. 1955. ii, 14p. diagrs. (NACA Rept. 1210. Supersedes TN 3145)

SHOCK-TURBULENCE INTERACTION AND THE GENERATION OF NOISE. H. S. Ribner. 1955. iii, 19p. diagrs., tab. (NACA Rept. 1233. Supersedes TN 3255)

AN INVESTIGATION OF THE EFFECTS OF HEAT TRANSFER ON BOUNDARY-LAYER TRANSITION ON A PARABOLIC BODY OF REVOLUTION (NACA RM-10) AT A MACH NUMBER OF 1.61. K. R. Czarnecki and Archibald R. Sinclair. 1955. 11p. diagrs., photos., tab. (NACA Rept. 1240. Supersedes TN 3165 and TN 3166)

EXPLORATORY INVESTIGATION OF FLOW IN THE SEPARATED REGION AHEAD OF TWO BLUNT BODIES AT MACH NUMBER 2. Harry Bernstein and William E. Brunk. June 1955. 27p. diagrs., photos. (NACA RM E55D07b)

TURBULENT-HEAT-TRANSFER MEASUREMENTS AT A MACH NUMBER OF 1.62. Maurice J. Brevoort and Bernard Rashis. June 1955. 15p. diagrs., tab. (NACA TN 3461)

PROPAGATION OF A FREE FLAME IN A TURBULENT GAS STREAM. William R. Mickelsen and Norman E. Ernstein. July 1955. 89p. diagrs., photos., 2 tabs. (NACA TN 3456)

A STUDY OF BOUNDARY-LAYER TRANSITION AND SURFACE TEMPERATURE DISTRIBUTIONS AT MACH 3.12. Paul F. Brinich. July 1955. 39p. diagrs., photo. (NACA TN 3509)

SOME MEASUREMENTS OF FLOW IN A RECTANGULAR CUTOUT. Anatol Roshko, California Institute of Technology. August 1955. 21p. diagrs. (NACA TN 3488)

CONTRIBUTIONS ON THE MECHANICS OF BOUNDARY-LAYER TRANSITION. G. B. Schubauer and P. S. Klebanoff, National Bureau of Standards. September 1955. 31p. diagrs. (NACA TN 3489)

AN EXPERIMENTAL INVESTIGATION OF REGIONS OF SEPARATED LAMINAR FLOW. Donald E. Gault. September 1955. 65p. diagrs., photos., 4 tabs. (NACA TN 3505)

FLIGHT INVESTIGATION OF THE SURFACE-PRESSURE DISTRIBUTION AND THE FLOW FIELD AROUND A CONICAL AND TWO SPHERICAL NONROTATING FULL-SCALE PROPELLER SPINNERS. Jerome B. Hammack, Milton L. Windler, and Elwood F. Scheithauer. September 1955. 36p. diagrs., photos. (NACA TN 3535)

INTENSITY, SCALE, AND SPECTRA OF TURBULENCE IN MIXING REGION OF FREE SUBSONIC JET. James C. Laurence. September 1955. 58p. diagrs., photo., tab. (NACA TN 3561)

THE THEORIES OF TURBULENCE. (Les Theories de la Turbulence). L. Agostini and J. Bass. October 1955. 163p. diagrs. (NACA TM 1377. Trans. from Ministere de l'Air, Publications Scientifiques et Techniques 277, 1950)

AN EXPERIMENTAL COMPARISON OF THE LAGRANGIAN AND EULERIAN CORRELATION COEFFICIENTS IN HOMOGENEOUS ISOTROPIC TURBULENCE. William R. Mickelsen. October 1955. 42p. diagrs. (NACA TN 3570)

BURNING VELOCITIES OF VARIOUS PREMIXED TURBULENT PROPANE FLAMES ON OPEN BURNERS. Paul Wagner. October 1955. 32p. diagrs., photos., tab. (NACA TN 3575)

CHARTS OF BOUNDARY-LAYER MASS FLOW AND MOMENTUM FOR INLET PERFORMANCE ANALYSIS MACH NUMBER RANGE, 0.2 TO 5.0. Paul C. Simon and Kenneth L. Kowalski. November 1955. 32p. diagrs., tab. (NACA TN 3583)

TURBULENT HEAT-TRANSFER MEASUREMENTS AT A MACH NUMBER OF 0.87. Maurice J. Brevoort and Bernard Rashis. December 1955. 13p. diagrs. (NACA TN 3599)

PRESSURE RISE ASSOCIATED WITH SHOCK-INDUCED BOUNDARY-LAYER SEPARATION. Eugene S. Love. December 1955. 32p. diagrs. (NACA TN 3601)

BOUNDARY-LAYER GROWTH AND SHOCK ATTENUATION IN A SHOCK TUBE WITH ROUGHNESS. Paul W. Huber and Donald R. McFarland. March 1956. 49p. diagrs., photos., tab. (NACA TN 3627)

EXPLORATORY INVESTIGATION OF BOUNDARY-LAYER TRANSITION ON A HOLLOW CYLINDER AT A MACH NUMBER OF 6.9. Mitchel H. Bertram. May 1956. 38p. diagrs., photo., tab. (NACA TN 3546)

BOUNDARY LAYER BEHIND SHOCK OR THIN EXPANSION WAVE MOVING INTO STATIONARY FLUID. Harold Mirels. May 1956. i, 53p. diagrs., tabs. (NACA TN 3712)

SPACE HEATING RATES FOR SOME PREMIXED TURBULENT PROPANE-AIR FLAMES. Burton D. Fine and Paul Wagner. June 1956. 26p. diagrs., tab. (NACA TN 3277)

A STUDY OF THE HIGH-SPEED PERFORMANCE CHARACTERISTICS OF 90° BENDS IN CIRCULAR DUCTS. James T. Higginbotham, Charles C. Wood, and E. Floyd Valentine. June 1956. 28p. diagrs. (NACA TN 3696)

APPLICATION OF SCATTERING THEORY TO THE MEASUREMENT OF TURBULENT DENSITY FLUCTUATIONS BY AN OPTICAL METHOD. Howard A. Stine and Warren Winovich. June 1956. 21p. diagrs., (NACA TN 3719)

AN EVALUATION OF FOUR EXPERIMENTAL METHODS FOR MEASURING MEAN PROPERTIES OF A SUPERSONIC TURBULENT BOUNDARY LAYER. George J. Nothwang. June 1956. 34p. diagrs., photos. (NACA TN 3721)

(1. 1. 3. 3)
JET MIXING

AERODYNAMIC INVESTIGATION OF A PARABOLIC BODY OF REVOLUTION AT MACH NUMBER OF 1.92 AND SOME EFFECTS OF AN ANNULAR JET EXHAUSTING FROM THE BASE. Eugene S. Love. February 8, 1950. 75p. diagrs., photos., tab. (NACA RM L9K09)

INVESTIGATION AT MACH NUMBER 1.91 OF SPREADING CHARACTERISTICS OF JET EXPANDING FROM CHOKED NOZZLES. Morris D. Rousso and L. Eugene Baughman. February 1952. 27p. photos., diagrs. (NACA RM E51L19)

PRELIMINARY DATA ON RAIN DEFLECTION FROM AIRCRAFT WINDSHIELDS BY MEANS OF HIGH-VELOCITY JET-AIR BLAST. Robert S. Ruggeri. July 1955. 17p. diagrs., photos. (NACA RM E55E17a)

INTENSITY, SCALE, AND SPECTRA OF TURBULENCE IN MIXING REGION OF FREE SUBSONIC JET. James C. Laurence. September 1955. 58p. diagrs., photo., tab. (NACA TN 3561)

EFFECT OF EXHAUST-NOZZLE EJECTORS ON TURBOJET NOISE GENERATION. Warren J. North and Willard D. Coles. October 1955. 26p. diagrs., photo. (NACA TN 3573)

INVESTIGATION OF FAR NOISE FIELD OF JETS. I - EFFECT OF NOZZLE SHAPE. Edmund E. Callaghan and Willard D. Coles. January 1956. 44p. diagrs., photos. (NACA TN 3590)

INVESTIGATION OF FAR NOISE FIELD OF JETS. II - COMPARISON OF AIR JETS AND JET ENGINES. Willard D. Coles and Edmund E. Callaghan. January 1956. 19p. diagrs., photos. (NACA TN 3591)

(1.1.4)
AERODYNAMICS WITH HEAT

DRAG MEASUREMENTS ON A 1/6-SCALE, FINLESS, STING-MOUNTED NACA RM-10 MISSILE IN FLIGHT AT MACH NUMBERS FROM 1.1 TO 4.04 SHOWING SOME REYNOLDS NUMBER AND HEATING EFFECTS. Robert O. Piland. October 1954. 20p. diagrs., photos. (NACA RM L54H09)

AN INVESTIGATION OF THE EFFECTS OF HEAT TRANSFER ON BOUNDARY-LAYER TRANSITION ON A PARABOLIC BODY OF REVOLUTION (NACA RM-10) AT A MACH NUMBER OF 1.61. K. R. Czarnecki and Archibald R. Sinclair. 1955. 11p. diagrs., photos., tab. (NACA Rept. 1240. Supersedes TN 3165 and TN 3166)

VARIATION OF BOUNDARY-LAYER TRANSITION WITH HEAT TRANSFER ON TWO BODIES OF REVOLUTION AT A MACH NUMBER OF 3.12. John R. Jack and N. S. Diaconis. September 1955. 16p. diagrs., photos. (NACA TN 3562)

EFFECT OF TRANSVERSE BODY FORCE ON CHANNEL FLOW WITH SMALL HEAT ADDITION. Simon Ostrach and Franklin K. Moore. February 1956. 31p. diagrs. (NACA TN 3594)

SOME EFFECTS OF BLUNTNESS ON BOUNDARY-LAYER TRANSITION AND HEAT TRANSFER AT SUPERSONIC SPEEDS. W. E. Moeckel. March 1956. 43p. diagrs. (NACA TN 3653)

STABILITY OF SYSTEMS CONTAINING A HEAT SOURCE - THE RAYLEIGH CRITERION. Boa-Teh Chu, Johns Hopkins University. June 1956. 25p. diagrs. (NACA RM 56D27)

(1.1.4.1) HEATING

PRELIMINARY RESULTS OF SUPERSONIC-JET TESTS OF SIMPLIFIED WING STRUCTURES. Richard R. Heldenfels and Richard Rosecrans. July 1953. 19p. diagrs., photos. (NACA RM L53E26a)

TEST OF AN AERODYNAMICALLY HEATED MULTIWEB WING STRUCTURE (MW-1) IN A FREE JET AT MACH NUMBER 2. Richard R. Heldenfels, Richard Rosecrans, and George E. Griffith. July 1953. 37p. diagrs., photos. (NACA RM L53E27)

TRANSIENT TEMPERATURE DISTRIBUTION IN AN AERODYNAMICALLY HEATED MULTIWEB WING. George E. Griffith. July 1953. 10p. diagrs. (NACA RM L53E27a)

A STUDY OF BOUNDARY-LAYER TRANSITION AND SURFACE TEMPERATURE DISTRIBUTIONS AT MACH 3.12. Paul F. Brinich. July 1955. 39p. diagrs., photo. (NACA TN 3509)

HEAT TRANSFER AT THE FORWARD STAGNATION POINT OF BLUNT BODIES. Eli Reshotko and Clarence B. Cohen. July 1955. 17p. diagrs. (NACA TN 3513)

SOME EFFECTS OF JOINT CONDUCTIVITY ON THE TEMPERATURES AND THERMAL STRESSES IN AERODYNAMICALLY HEATED SKIN-STIFFENER COMBINATIONS. George E. Griffith and Georgene H. Miltonberger. June 1956. 62p. diagrs. (NACA TN 3699)

(1.1.4.2) HEAT TRANSFER

WIRE CLOTH AS POROUS MATERIAL FOR TRANSPIRATION-COOLED WALLS. E. R. G. Eckert, Martin R. Kinsler, and Reeves P. Cochran. November 1951. 38p. diagrs., photos., tab. (NACA RM E51H23)

PROCEDURE FOR CALCULATING TURBINE BLADE TEMPERATURES AND COMPARISON OF CALCULATED WITH OBSERVED VALUES FOR TWO STATIONARY AIR-COOLED BLADES. W. Byron Brown, Henry O. Slone, and Hadley T. Richards. September 1952. 38p. diagrs. (NACA RM E52H07)

EFFECT OF VARIABLE VISCOSITY AND THERMAL CONDUCTIVITY ON HIGH-SPEED SLIP FLOW BETWEEN CONCENTRIC CYLINDERS. T. C. Lin and R. E. Street, University of Washington. 1954. ii, 36p. diagrs. (NACA Rept. 1175. Formerly TN 2895)

EXPERIMENTAL CONVECTIVE HEAT TRANSFER TO A 4-INCH AND 6-INCH HEMISPHERE AT MACH NUMBERS FROM 1.62 TO 3.04. Leo T. Chauvin and Joseph P. Maloney. February 1954. 18p. diagrs., photos. (NACA RM L53L08a)

DRAG AND HEAT TRANSFER ON A PARABOLIC BODY OF REVOLUTION (NACA RM-10) IN FREE FLIGHT TO MACH NUMBER 2 WITH BOTH CONSTANT AND VARYING REYNOLDS NUMBER AND HEATING EFFECTS ON TURBULENT SKIN FRICTION. Joseph P. Maloney. June 1954. 34p. diagrs., photo. (NACA RM L54D06)

CALCULATIONS OF LAMINAR HEAT TRANSFER AROUND CYLINDERS OF ARBITRARY CROSS SECTION AND TRANSPIRATION-COOLED WALLS WITH APPLICATION TO TURBINE BLADE COOLING. E. R. G. Eckert and J. N. B. Livingood. 1955. ii, 21p. diagrs., tabs. (NACA Rept. 1220. Supersedes RM E51F22)

EXACT SOLUTIONS OF LAMINAR-BOUNDARY-LAYER EQUATIONS WITH CONSTANT PROPERTY VALUES FOR POROUS WALL WITH VARIABLE TEMPERATURE. Patrick L. Donoughe and John N. B. Livingood. 1955. ii, 21p. diagrs., tabs. (NACA Rept. 1229. Supersedes TN 3151)

TURBULENT-HEAT-TRANSFER MEASUREMENTS AT A MACH NUMBER OF 1.62. Maurice J. Brevoort and Bernard Rashis. June 1955. 15p. diagrs., tab. (NACA TN 3461)

RECOVERY AND TIME-RESPONSE CHARACTERISTICS OF SIX THERMOCOUPLE PROBES IN SUBSONIC AND SUPERSONIC FLOW. Truman M. Stickney. July 1955. 25p. diagrs., photos., 2 tabs. (NACA TN 3455)

UNSTABLE CONVECTION IN VERTICAL CHANNELS WITH HEATING FROM BELOW, INCLUDING EFFECTS OF HEAT SOURCES AND FRICTIONAL HEATING. Simon Ostrach. July 1955. 38p. diagrs., 3 tabs. (NACA TN 3458)

LAMINAR FREE CONVECTION ON A VERTICAL PLATE WITH PRESCRIBED NONUNIFORM WALL HEAT FLUX OR PRESCRIBED NONUNIFORM WALL TEMPERATURE. E. M. Sparrow. July 1955. 34p. diagrs. (NACA TN 3508)

HEAT TRANSFER AT THE FORWARD STAGNATION POINT OF BLUNT BODIES. Eli Reshotko and Clarence B. Cohen. July 1955. 17p. diagrs. (NACA TN 3513)

VARIATION OF BOUNDARY-LAYER TRANSITION WITH HEAT TRANSFER ON TWO BODIES OF REVOLUTION AT A MACH NUMBER OF 3.12. John R. Jack and N. S. Diaconis. September 1955. 16p. diagrs., photos. (NACA TN 3562)

HEAT LOSS FROM YAWED HOT WIRES AT SUBSONIC MACH NUMBERS. Virgil A. Sandborn and James C. Laurence. September 1955. 44p. diagrs., photo. (NACA TN 3563)

AN EXPERIMENTAL COMPARISON OF THE LAGRANGIAN AND EULERIAN CORRELATION COEFFICIENTS IN HOMOGENEOUS ISOTROPIC TURBULENCE. William R. Mickelsen. October 1955. 42p. diagrs. (NACA TN 3570)

LAMINAR SEPARATION OVER A TRANSPIRATION-COOLED SURFACE IN COMPRESSIBLE FLOW. Morris Morduchow, Polytechnic Institute of Brooklyn. December 1955. 32p. diagrs. (NACA TN 3559)

SUMMARY OF LAMINAR-BOUNDARY-LAYER SOLUTIONS FOR WEDGE-TYPE FLOW OVER CONVECTION- AND TRANSPIRATION-COOLED SURFACES. John N. B. Livingood and Patrick L. Donoughe. December 1955. 33p. diagrs., tabs. (NACA TN 3588)

TURBULENT HEAT-TRANSFER MEASUREMENTS AT A MACH NUMBER OF 0.87. Maurice J. Brevoort and Bernard Rashis. December 1955. 13p. diagrs. (NACA TN 3599)

EXPERIMENTAL INVESTIGATION OF AIR-FLOW UNIFORMITY AND PRESSURE LEVEL ON WIRE CLOTH FOR TRANSPIRATION-COOLING APPLICATIONS. Patrick L. Donoughe and Roy A. McKinnon. January 1956. 28p. diagrs., photos., tab. (NACA TN 3652. Supersedes RM E52E16)

CORRELATION OF SUPERSONIC CONVECTIVE HEAT-TRANSFER COEFFICIENTS FROM MEASUREMENTS OF THE SKIN TEMPERATURE OF A PARABOLIC BODY OF REVOLUTION (NACA RM-10). Leo T. Chauvin and Carlos A. deMoraes. March 1956. 38p. diagrs., photo., tabs. (NACA TN 3623. Supersedes RM L51A18)

(1.1.4.3)
ADDITIONS OF HEAT

ANALYSIS AND EXPERIMENTAL OBSERVATION OF PRESSURE LOSSES IN RAM-JET COMBUSTION CHAMBERS. William H. Sterbentz. November 4, 1949. 22p. diagrs. (NACA RM E9H19)

PRESSURE WAVES GENERATED BY ADDITION OF HEAT IN A GASEOUS MEDIUM. Boa-Teh Chu, Johns Hopkins University. June 1955. 47p. diagrs. (NACA TN 3411)

(1.1.5)
FLOW OF RAREFIED GASES

A LOW-DENSITY WIND-TUNNEL STUDY OF SHOCK-WAVE STRUCTURE AND RELAXATION PHENOMENA IN GASES. F. S. Sherman, University of California. July 1955. 83p. diagrs., photos., 2 tabs. (NACA TN 3298)

(1.1.5.1)
SLIP FLOW

EFFECT OF VARIABLE VISCOSITY AND THERMAL CONDUCTIVITY ON HIGH-SPEED SLIP FLOW BETWEEN CONCENTRIC CYLINDERS. T. C. Lin and R. E. Street, University of Washington. 1954. ii, 36p. diagrs. (NACA Rept. 1175. Formerly TN 2895)

(1.2) Wings

THE BASE PRESSURE AT SUPERSONIC SPEEDS ON TWO-DIMENSIONAL AIRFOILS AND BODIES OF REVOLUTION (WITH AND WITHOUT FINS) HAVING TURBULENT BOUNDARY LAYERS. Eugene S. Love. April 1953. 65p. diagrs., photos. (NACA RM L53C02)

A UNIFIED TWO-DIMENSIONAL APPROACH TO THE CALCULATION OF THREE-DIMENSIONAL HYPERSONIC FLOWS, WITH APPLICATION TO BODIES OF REVOLUTION. A. J. Eggers, Jr. and Raymond C. Savin. 1955. ii, 27p. diagrs., tab. (NACA Rept. 1249. Supersedes TN 2811)

REMARK ON THE THEORY OF LIFTING SURFACES. (Sulla teoria delle superfici portanti). Aldo Muggia. January 1956. 11p. diagrs. (NACA TM 1386. Trans. from Atti della Accademia delle Scienze di Torino, v. 87, 1952-1953)

(1.2.1) WING SECTIONS

EFFECTS OF BASE BLEED ON THE BASE PRESSURE OF BLUNT-TRAILING-EDGE AIRFOILS AT SUPERSONIC SPEEDS. William R. Wimbrow. March 1954. 33p. diagrs., photos. (NACA RM A54A07)

(1.2.1.1) SECTION THEORY

THEORETICAL PREDICTION OF PRESSURE DISTRIBUTIONS ON NONLIFTING AIRFOILS AT HIGH SUBSONIC SPEEDS. John R. Spreiter and Alberta Alksne. 1955. iii, 42p. diagrs., photos. (NACA Rept. 1217. Supersedes TN 3096)

CALCULATION OF THE SUPERSONIC PRESSURE DISTRIBUTION ON A SINGLE-CURVED TAPERED WING IN REGIONS NOT INFLUENCED BY THE ROOT OR TIP. Walter G. Vincenti and Newman H. Fisher, Jr. June 1955. 32p. diagrs. (NACA TN 3499)

(1.2.1.2) SECTION VARIABLES

THE EFFECT OF REYNOLDS NUMBER ON THE STALLING CHARACTERISTICS AND PRESSURE DISTRIBUTIONS OF FOUR MODERATELY THIN AIRFOIL SECTIONS. George B. McCullough. November 1955. 24p. diagrs., tabs. (NACA TN 3524)

(1.2.1.2.1) Camber

INVESTIGATION OF THE LOW-SPEED AERODYNAMIC CHARACTERISTICS OF A VARIABLE-SWEEP AIRPLANE MODEL WITH A WING HAVING PARTIAL-SPAN CAMBERED-LEADING-EDGE MODIFICATIONS. Robert E. Becht and Andrew L. Byrnes, Jr. September 1952. 47p. diagrs., photos. (NACA RM L52G08a)

A FLIGHT INVESTIGATION OF THE EFFECT OF LEADING-EDGE CAMBER ON THE AERODYNAMIC CHARACTERISTICS OF A SWEPT-WING AIRPLANE. Seth B. Anderson, Frederick H. Matteson, and Rudolph D. Van Dyke, Jr. February 1953. 23p. diagrs., photos., tab. (NACA RM A52L16a)

DETERMINATION OF MEAN CAMBER SURFACES FOR WINGS HAVING UNIFORM CHORDWISE LOADING AND ARBITRARY SPANWISE LOADING IN SUBSONIC FLOW. S. Katzoff, M. Frances Faison and Hugh C. DuBose. 1954. ii, 17p. diagrs., tab. (NACA Rept. 1176. Formerly TN 2908)

EFFECTS OF HIGH-LIFT DEVICES AND HORIZONTAL-TAIL LOCATION ON THE LOW-SPEED CHARACTERISTICS OF A LARGE-SCALE 45° SWEPT-WING AIRPLANE CONFIGURATION. Ralph L. Maki and Ursel R. Embry. August 1954. 46p. diagrs., photo., tabs. (NACA RM A54E10)

EFFECT OF THICKNESS, CAMBER, AND THICKNESS DISTRIBUTION ON AIRFOIL CHARACTERISTICS AT MACH NUMBERS UP TO 1.0. Bernard N. Daley and Richard S. Dick. March 1956. 75p. diagrs., photos., tab. (NACA TN 3607. Supersedes RM L52G31a)

(1.2.1.2.2) Thickness

FREE-FLIGHT INVESTIGATION OF CONTROL EFFECTIVENESS OF FULL-SPAN, 0.2-CHORD PLAIN AILERONS AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS TO DETERMINE SOME EFFECTS OF WING SWEEPBACK TAPER, ASPECT RATIO, AND SECTION-THICKNESS RATIO. Carl A. Sandahl. August 13, 1947. 16p. diagrs., photos., tab. (NACA RM L7F30)

LONGITUDINAL FLIGHT CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 59° SWEEPBACK WITH MODIFIED WING ROOTS. James A. Martin. August 1953. 25p. diagrs., photos., tab. (NACA RM L53E28)

FLIGHT MEASUREMENTS OF LIFT AND DRAG FOR THE BELL X-1 RESEARCH AIRPLANE HAVING A 10-PERCENT-THICK WING. Edwin J. Saltzman. September 1953. 37p. diagrs., tab. (NACA RM L53F08)

SUPERSONIC FLOW PAST OSCILLATING AIRFOILS INCLUDING NONLINEAR THICKNESS EFFECTS. Milton D. Van Dyke. 1954. ii, 17p. diagrs. (NACA Rept. 1183. Formerly TN 2982)

THEORETICAL PREDICTION OF PRESSURE DISTRIBUTIONS ON NONLIFTING AIRFOILS AT HIGH SUBSONIC SPEEDS. John R. Spreiter and Alberta Alksne. 1955. iii, 42p. diagrs., photos. (NACA Rept. 1217. Supersedes TN 3096)

EFFECT OF THICKNESS, CAMBER, AND THICKNESS DISTRIBUTION ON AIRFOIL CHARACTERISTICS AT MACH NUMBERS UP TO 1.0. Bernard N. Daley and Richard S. Dick. March 1956. 75p. diagrs., photos., tab. (NACA TN 3607. Supersedes RM L52G31a)

EXPERIMENTAL INVESTIGATION OF THE FLOW AROUND LIFTING SYMMETRICAL DOUBLE-WEDGE AIRFOILS AT MACH NUMBERS OF 1.30 AND 1.41. Paul B. Gooderum and George P. Wood. March 1956. 86p. diagrs., photos. (NACA TN 3626)

RESULTS OF A FLIGHT INVESTIGATION TO DETERMINE THE ZERO-LIFT DRAG CHARACTERISTICS OF A 60° DELTA WING WITH NACA 65-006 AIRFOIL SECTION AND VARIOUS DOUBLE-WEDGE SECTIONS AT MACH NUMBERS FROM 0.7 TO 1.6. Clement J. Welsh. April 1956. 13p. diagrs., photo. (NACA TN 3650. Supersedes RM L50F01)

(1.2.1.2.3)
Thickness Distribution

EFFECTS OF SOME AIRFOIL-SECTION VARIATIONS ON WING-AILERON ROLLING EFFECTIVENESS AND DRAG AS DETERMINED IN FREE FLIGHT AT TRANSONIC AND SUPERSONIC SPEEDS. Carl A. Sandahl, William M. Bland, Jr., and H. Kurt Strass. July 22, 1949. 29p. diagrs., photos., tabs. (NACA RM L9D12)

AN EXPERIMENTAL INVESTIGATION OF THE ZERO-LIFT-DRAG CHARACTERISTICS OF SYMMETRICAL BLUNT-TRAILING-EDGE AIRFOILS AT MACH NUMBERS FROM 2.7 TO 5.0. Clarence A. Syvertson and Hermilo R. Gloria. April 1953. 31p. diagrs., photos., tabs. (NACA RM A53B02)

MEASUREMENTS OF NORMAL-FORCE-COEFFICIENT FLUCTUATION ON FOUR 9-PERCENT-THICK AIRFOILS HAVING DIFFERENT LOCATIONS OF MAXIMUM THICKNESS. Milton D. Humphreys. April 1954. 21p. diagrs., photos. (NACA RM L54B22)

EFFECT OF TRAILING-EDGE THICKNESS ON LIFT AT SUPERSONIC VELOCITIES. Dean R. Chapman and Robert H. Kester. June 1955. 19p. diagrs. (NACA TN 3504. Formerly RM A52D17)

EFFECT OF THICKNESS, CAMBER, AND THICKNESS DISTRIBUTION ON AIRFOIL CHARACTERISTICS AT MACH NUMBERS UP TO 1.0. Bernard N. Daley and Richard S. Dick. March 1956. 75p. diagrs., photos., tab. (NACA TN 3607. Supersedes RM L52G31a)

RESULTS OF A FLIGHT INVESTIGATION TO DETERMINE THE ZERO-LIFT DRAG CHARACTERISTICS OF A 60° DELTA WING WITH NACA 65-006 AIRFOIL SECTION AND VARIOUS DOUBLE-WEDGE SECTIONS AT MACH NUMBERS FROM 0.7 TO 1.6. Clement J. Welsh. April 1956. 13p. diagrs., photo. (NACA TN 3650. Supersedes RM L50F01)

(1.2.1.2.5)
Surface Conditions

IMPINGEMENT OF CLOUD DROPLETS ON A CYLINDER AND PROCEDURE FOR MEASURING LIQUID-WATER CONTENT AND DROPLET SIZES IN SUPERCOOLED CLOUDS BY ROTATING MULTICYLINDER METHOD. R. J. Brun, W. Lewis, P. J. Perkins and J. S. Serafini. Appendix E: ALTERNATE METHOD OF REDUCING ROTATING MULTICYLINDER DATA. Paul T. Hacker. 1955. iv, 43p. diagrs., photos., tabs. (NACA Rept. 1215. Supersedes TN 2903; TN 2904; RM E53D23)

IMPINGEMENT OF WATER DROPLETS ON NACA 65A004 AIRFOIL AT 0° ANGLE OF ATTACK. Rinaldo J. Brun and Dorothea E. Vogt. November 1955. 28p. diagrs. (NACA TN 3586)

EFFECT OF PNEUMATIC DE-ICERS AND ICE FORMATIONS ON AERODYNAMIC CHARACTERISTICS OF AN AIRFOIL. Dean T. Bowden. February 1956. 59p. diagrs., photos. (NACA TN 3564)

(1.2.1.3)
DESIGNATED PROFILES

FREE-FLIGHT INVESTIGATION OF CONTROL EFFECTIVENESS OF FULL-SPAN, 0.2-CHORD PLAIN AILERONS AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS TO DETERMINE SOME EFFECTS OF WING SWEEPBACK, TAPER, ASPECT RATIO, AND SECTION-THICKNESS RATIO. Carl A. Sandahl. August 13, 1947. 16p. diagrs., photos., tab. (NACA RM L7F30)

AERODYNAMIC CHARACTERISTICS OF FOUR WINGS OF SWEEPBACK ANGLES 0°, 35°, 45°, AND 60°, NACA 65A006 AIRFOIL SECTION, ASPECT RATIO 4, AND TAPER RATIO 0.6 IN COMBINATION WITH A FUSELAGE AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. Arvo A. Luoma. June 6, 1951. 59p. diagrs., photo., tab. (NACA RM L51D13)

REDUCTION OF PROFILE DRAG AT SUPERSONIC VELOCITIES BY THE USE OF AIRFOIL SECTIONS HAVING A BLUNT TRAILING EDGE. Dean R. Chapman. September 1955. 29p. diagrs., photo. (NACA TN 3503. Supersedes RM A9H11)

AN EXPERIMENTAL INVESTIGATION OF REGIONS OF SEPARATED LAMINAR FLOW. Donald E. Gault. September 1955. 65p. diagrs., photos., 4 tabs. (NACA TN 3505)

FLIGHT INVESTIGATION AT MACH NUMBERS FROM 0.6 TO 1.7 TO DETERMINE DRAG AND BASE PRESSURES ON A BLUNT-TRAILING-EDGE AIRFOIL AND DRAG OF DIAMOND AND CIRCULAR-ARC AIRFOILS AT ZERO LIFT. John D. Morrow and Ellis Katz. November 1955. 19p. diagrs., photos. (NACA TN 3548. Supersedes RM L50E19a)

MEASUREMENTS OF THE EFFECT OF TRAILING-EDGE THICKNESS ON THE ZERO-LIFT DRAG OF THIN LOW-ASPECT-RATIO WINGS. John D. Morrow. November 1955. 11p. diagrs., photo. (NACA TN 3550. Supersedes RM L50F26)

EXPERIMENTAL INVESTIGATION OF THE FLOW AROUND LIFTING SYMMETRICAL DOUBLE-WEDGE AIRFOILS AT MACH NUMBERS OF 1.30 AND 1.41. Paul B. Gooderum and George P. Wood. March 1956. 86p. diagrs., photos. (NACA TN 3626)

(1.2.1.5) CONTROLS

(1.2.1.5.1) Flap Type

EFFECTS OF SWEEP ON CONTROLS. John G. Lowry, John A. Axelson, and Harold I. Johnson. June 3, 1948. 29p. diagrs. (NACA RM L8A28c)

PRELIMINARY DATA AT A MACH NUMBER OF 2.40 OF THE CHARACTERISTICS OF FLAP-TYPE CONTROLS EQUIPPED WITH PLAIN OVERHANG BALANCES. James N. Mueller and K. R. Czarnecki. September 1952. 43p. diagrs., photos. (NACA RM L52F10)

AILERON AND ELEVATOR HINGE MOMENTS OF THE BELL X-1 AIRPLANE MEASURED IN TRANSONIC FLIGHT. Hubert M. Drake and John B. McKay. June 1953. 27p. diagrs. (NACA RM L53E04)

(1.2.1.5.2) Spoilers

EXPERIMENTAL INVESTIGATION OF THE OSCILLATING FORCES AND MOMENTS ON A TWO-DIMENSIONAL WING EQUIPPED WITH AN OSCILLATING CIRCULAR-ARC SPOILER. Sherman A. Clevenson and John E. Tomassoni. January 1954. 20p. diagrs., photos. (NACA RM L53K18)

(1.2.1.6) BOUNDARY LAYER

AN INVESTIGATION OF FOUR WINGS OF SQUARE PLAN FORM AT A MACH NUMBER OF 6.86 IN THE LANGLEY 11-INCH HYPERSONIC TUNNEL. Charles H. McLellan, Mitchel H. Bertram, and John A. Moore. June 1951. 47p. diagrs., photos. (NACA RM L51D17)

THE EFFECT OF REYNOLDS NUMBER ON THE STALLING CHARACTERISTICS AND PRESSURE DISTRIBUTIONS OF FOUR MODERATELY THIN AIRFOIL SECTIONS. George B. McCullough. November 1955. 24p. diagrs., tabs. (NACA TN 3524)

LIFT HYSTERESIS AT STALL AS AN UNSTEADY BOUNDARY-LAYER PHENOMENON. Franklin K. Moore. November 1955. 32p. diagrs., tab. (NACA TN 3571)

PRELIMINARY FLIGHT SURVEY OF AERODYNAMIC NOISE ON AN AIRPLANE WING. Harold R. Mull and Joseph S. Algranti. March 1956. 8p. diagrs. (NACA RM E55K07)

PRELIMINARY REPORT ON A STUDY OF SEPARATED FLOWS IN SUPERSONIC AND SUBSONIC STREAMS. Dean R. Chapman, Donald M. Kuehn, and Howard K. Larson. June 1956. 15p. diagrs., photos. (NACA RM A55L14)

(1.2.1.6.1) Characteristics

EFFECTS OF SWEEP AND ANGLE OF ATTACK ON BOUNDARY-LAYER TRANSITION ON WINGS AT MACH NUMBER 4.04. Robert W. Dunning and Edward F. Ulmann. August 1955. 31p. diagrs., photos. (NACA TN 3473)

AN EXPERIMENTAL INVESTIGATION OF REGIONS OF SEPARATED LAMINAR FLOW. Donald E. Gault. September 1955. 65p. diagrs., photos., 4 tabs. (NACA TN 3505)

(1.2.1.6.2) Control

PRESSURE RISE ASSOCIATED WITH SHOCK-INDUCED BOUNDARY-LAYER SEPARATION. Eugene S. Love. December 1955. 32p. diagrs. (NACA TN 3601)

ON THE PERMEABILITY OF POROUS MATERIALS. E. Carson Yates, Jr. January 1956. 31p. diagrs. (NACA TN 3596)

PERFORATED SHEETS AS A POROUS MATERIAL FOR DISTRIBUTED SUCTION AND INJECTION. Robert E. Dannenberg, Bruno J. Gambucci, and James A. Weiberg. April 1956. 27p. diagrs., photos. (NACA TN 3669)

(1.2.1.7) REYNOLDS NUMBER EFFECTS

AN EXPERIMENTAL INVESTIGATION OF THE ZERO-LIFT-DRAG CHARACTERISTICS OF SYMMETRICAL BLUNT-TRAILING-EDGE AIRFOILS AT MACH NUMBERS FROM 2.7 TO 5.0. Clarence A. Syvertson and Hermilo R. Gloria. April 1953. 31p. diagrs., photos., tabs. (NACA RM A53B02)

EFFECTS OF BASE BLEED ON THE BASE PRESSURE OF BLUNT-TRAILING-EDGE AIRFOILS AT SUPERSONIC SPEEDS. William R. Wimbrow. March 1954. 33p. diagrs., photos. (NACA RM A54A07)

EFFECTS OF SWEEP AND ANGLE OF ATTACK ON BOUNDARY-LAYER TRANSITION ON WINGS AT MACH NUMBER 4.04. Robert W. Dunning and Edward F. Ulmann. August 1955. 31p. diagrs., photos. (NACA TN 3473)

AN EXPERIMENTAL INVESTIGATION OF REGIONS OF SEPARATED LAMINAR FLOW. Donald E. Gault. September 1955. 65p. diagrs., photos., 4 tabs. (NACA TN 3505)

(1.2.1.8) MACH NUMBER EFFECTS

MEASUREMENTS OF THE CHORDWISE PRESSURE DISTRIBUTIONS OVER THE WING OF THE XS-1 RESEARCH AIRPLANE IN FLIGHT. De E. Beeler, Milton D. McLaughlin, and Dorothy C. Clift. August 4, 1948. 35p. diagrs., photo., tab. (NACA RM L8G21)

REVIEW OF SOME RECENT DATA ON BUFFET BOUNDARIES. Paul E. Purser and John A. Wyss. May 23, 1951. 11p. diagrs. (NACA RM L51E02a)

A CORRELATION WITH FLIGHT TESTS OF RESULTS OBTAINED FROM THE MEASUREMENT OF WING PRESSURE DISTRIBUTIONS ON A 1/4-SCALE MODEL OF THE X-1 AIRPLANE (10-PERCENT-THICK WING). Jack F. Runckel and James H. Henderson. September 1952. 60p. diagrs., photos., tab. (NACA RM L52E29)

AN EXPERIMENTAL INVESTIGATION OF THE ZERO-LIFT-DRAG CHARACTERISTICS OF SYMMETRICAL BLUNT-TRAILING-EDGE AIRFOILS AT MACH NUMBERS FROM 2.7 TO 5.0. Clarence A. Syvertson and Hermilo R. Gloria. April 1953. 31p. diagrs., photos., tabs. (NACA RM A53B02)

AILERON AND ELEVATOR HINGE MOMENTS OF THE BELL X-1 AIRPLANE MEASURED IN TRANSONIC FLIGHT. Hubert M. Drake and John B. McKay. June 1953. 27p. diagrs. (NACA RM L53E04)

EFFECTS OF BASE BLEED ON THE BASE PRESSURE OF BLUNT-TRAILING-EDGE AIRFOILS AT SUPERSONIC SPEEDS. William R. Wimbrow. March 1954. 33p. diagrs., photos. (NACA RM A54A07)

MEASUREMENTS OF NORMAL-FORCE-COEFFICIENT FLUCTUATION ON FOUR 9-PERCENT-THICK AIRFOILS HAVING DIFFERENT LOCATIONS OF MAXIMUM THICKNESS. Milton D. Humphreys. April 1954. 21p. diagrs., photos. (NACA RM L54B22)

THEORETICAL PREDICTION OF PRESSURE DISTRIBUTIONS ON NONLIFTING AIRFOILS AT HIGH SUBSONIC SPEEDS. John R. Spreiter and Alberta Alksne. 1955. iii, 42p. diagrs., photos. (NACA Rept. 1217. Supersedes TN 3096)

EFFECTS OF SWEEP AND ANGLE OF ATTACK ON BOUNDARY-LAYER TRANSITION ON WINGS AT MACH NUMBER 4.04. Robert W. Dunning and Edward F. Ulmann. August 1955. 31p. diagrs., photos. (NACA TN 3473)

EFFECT OF THICKNESS, CAMBER, AND THICKNESS DISTRIBUTION ON AIRFOIL CHARACTERISTICS AT MACH NUMBERS UP TO 1.0. Bernard N. Daley and Richard S. Dick. March 1956. 75p. diagrs., photos., tab. (NACA TN 3607. Supersedes RM L52G31a)

EXPERIMENTAL INVESTIGATION OF THE FLOW AROUND LIFTING SYMMETRICAL DOUBLE-WEDGE AIRFOILS AT MACH NUMBERS OF 1.30 AND 1.41. Paul B. Gooderum and George P. Wood. March 1956. 86p. diagrs., photos. (NACA TN 3626)

(1.2.1.9)
WAKE

EFFECTS OF BASE BLEED ON THE BASE PRESSURE OF BLUNT-TRAILING-EDGE AIRFOILS AT SUPERSONIC SPEEDS. William R. Wimbrow. March 1954. 33p. diagrs., photos. (NACA RM A54A07)

THEORETICAL LOSS RELATIONS FOR LOW-SPEED TWO-DIMENSIONAL-CASCADE FLOW. Seymour Lieblein and William H. Roudebush. March 1956. 46p. diagrs., tab. (NACA TN 3662)

(1.2.2)
COMPLETE WINGS

THE TRANSONIC CHARACTERISTICS OF A LOW-ASPECT-RATIO TRIANGULAR WING WITH A CONSTANT-CHORD FLAP AS DETERMINED BY WING-FLOW TESTS, INCLUDING CORRELATION WITH LARGE-SCALE TESTS. George A. Rathert, Jr., L. Stewart Rolls, and Carl M. Hanson. July 18, 1950. 39p. diagrs., photo. (NACA RM A50E10)

AN INVESTIGATION OF FOUR WINGS OF SQUARE PLAN FORM AT A MACH NUMBER OF 6.86 IN THE LANGLEY 11-INCH HYPERSONIC TUNNEL. Charles H. McLellan, Mitchel H. Bertram, and John A. Moore. June 1951. 47p. diagrs., photos. (NACA RM L51D17)

PRELIMINARY INVESTIGATION AT SUBSONIC AND TRANSONIC SPEEDS OF THE AERODYNAMIC CHARACTERISTICS OF A BIPLANE COMPOSED OF A SWEPTBACK AND A SWEPTFORWARD WING JOINED AT THE TIPS. Jones F. Cahill and Dexter H. Stead. March 1954. 19p. diagrs., photos. (NACA RM L53L24b)

A WIND-TUNNEL INVESTIGATION OF A 0.4-SCALE MODEL OF AN ASSAULT-TRANSPORT AIRPLANE WITH BOUNDARY-LAYER CONTROL APPLIED. Marvin P. Fink, Bennie W. Cocke, and Stanley Lipson. May 1956. 63p. diagrs., photos. (NACA RM L55G26a)

(1.2.2.1)
WING THEORY

EXPERIMENTAL DETERMINATION OF EFFECT OF STRUCTURAL RIGIDITY ON ROLLING EFFECTIVENESS OF SOME STRAIGHT AND SWEPT WINGS AT MACH NUMBERS FROM 0.7 TO 1.7. H. Kurt Strass, E. M. Fields, and Paul E. Purser. October 4, 1950. 40p. diagrs., photo., tab. (NACA RM L50G14b)

A COMPARISON OF THE EXPERIMENTAL AND THEORETICAL LOADING OVER TRIANGULAR WINGS IN SIDESLIP AT SUPERSONIC SPEEDS. John W. Boyd. May 18, 1951. 58p. diagrs., photo., tabs. (NACA RM A51C13)

DOWNWASH AND SIDEWASH FIELDS BEHIND CRUCIFORM WINGS. John R. Spreiter. January 1952. 18p. photos., diagrs. (NACA RM A51L17)

COMPARISON OF MEASURED AND PREDICTED INDICATED ANGLES OF ATTACK NEAR THE FUSELAGES OF A TRIANGULAR-WING WIND-TUNNEL MODEL AND A SWEPT-WING FIGHTER AIRPLANE IN FLIGHT. Norman M. McFadden, John L. McCloud, III, and Harry A. James. March 1953. 13p. diagrs. (NACA RM A53A15)

DETERMINATION OF MEAN CAMBER SURFACES FOR WINGS HAVING UNIFORM CHORDWISE LOADING AND ARBITRARY SPANWISE LOADING IN SUBSONIC FLOW. S. Katzoff, M. Frances Faison and Hugh C. DuBose. 1954. ii, 17p. diagrs., tab. (NACA Rept. 1176. Formerly TN 2908)

A COMPARISON OF THE SPANWISE LOADING CALCULATED BY VARIOUS METHODS WITH EXPERIMENTAL LOADINGS OBTAINED ON A 45° SWEPTBACK WING OF ASPECT RATIO 8.02 AT A REYNOLDS NUMBER OF 4.0×10^{6}. William C. Schneider. 1954. ii, 11p. diagrs., tab. (NACA Rept. 1208. Supersedes RM L51G30)

COMPARISON BETWEEN THEORETICAL AND EXPERIMENTAL RATES OF ROLL OF TWO MODELS WITH FLEXIBLE RECTANGULAR WINGS AT SUPERSONIC SPEEDS. John M. Hedgepeth and Robert J. Kell. August 1954. 21p. diagrs., photo., tabs. (NACA RM L54F23)

A METHOD FOR THE DESIGN OF SWEPTBACK WINGS WARPED TO PRODUCE SPECIFIED FLIGHT CHARACTERISTICS AT SUPERSONIC SPEEDS. Warren A. Tucker. 1955. i, 17p. diagrs., tabs. (NACA Rept. 1226. Supersedes RM L51F08)

GENERALIZED INDICIAL FORCES ON DEFORMING RECTANGULAR WINGS IN SUPERSONIC FLIGHT. Harvard Lomax, Franklyn B. Fuller and Loma Sluder. 1955. ii, 27p. diagrs., tab. (NACA Rept. 1230. Supersedes TN 3286)

A CORRELATION BY MEANS OF TRANSONIC SIMILARITY RULES OF EXPERIMENTALLY DETERMINED CHARACTERISTICS OF A SERIES OF SYMMETRICAL AND CAMBERED WINGS OF RECTANGULAR PLAN FORM. John B. McDevitt. 1955. ii, 23p. diagrs., tabs. (NACA Rept. 1253. Supersedes RM A51L17b; RM A53G31)

CALCULATION OF THE SUPERSONIC PRESSURE DISTRIBUTION ON A SINGLE-CURVED TAPERED WING IN REGIONS NOT INFLUENCED BY THE ROOT OR TIP. Walter G. Vincenti and Newman H. Fisher, Jr. June 1955. 32p. diagrs. (NACA TN 3499)

AERODYNAMICS OF A RECTANGULAR WING OF INFINITE ASPECT RATIO AT HIGH ANGLES OF ATTACK AND SUPERSONIC SPEEDS. John C. Martin and Frank S. Malvestuto, Jr. July 1955. 114p. diagrs., tab. (NACA TN 3421)

CORRECTION OF ADDITIONAL SPAN LOADINGS COMPUTED BY THE WEISSINGER SEVEN-POINT METHOD FOR MODERATELY TAPERED WINGS OF HIGH ASPECT RATIO. John DeYoung and Walter H. Barling, Jr. July 1955. 31p. diagrs. (NACA TN 3500)

THE PROPER COMBINATION OF LIFT LOADING FOR LEAST DRAG ON A SUPERSONIC WING. Frederick C. Grant. October 1955. 21p. diagrs. (NACA TN 3533)

A THEORETICAL STUDY OF THE AERODYNAMICS OF SLENDER CRUCIFORM-WING ARRANGEMENTS AND THEIR WAKES. John R. Spreiter and Alvin H. Sacks. March 1956. i, 67p. diagrs., photos., tabs. (NACA TN 3528)

AN ANALYSIS OF ESTIMATED AND EXPERIMENTAL TRANSONIC DOWNWASH CHARACTERISTICS AS AFFECTED BY PLAN FORM AND THICKNESS FOR WING AND WING-FUSELAGE CONFIGURATIONS. Joseph Weil, George S. Campbell and Margaret S. Diederich. April 1956. 92p. diagrs., photos., tabs. (NACA TN 3628. Supersedes RM L52I22)

THEORETICAL PRESSURE DISTRIBUTIONS FOR SOME SLENDER WING-BODY COMBINATIONS AT ZERO LIFT. Paul F. Byrd. April 1956. 39p. diagrs. (NACA TN 3674. Supersedes RM A54J07)

ON THE RANGE OF APPLICABILITY OF THE TRANSONIC AREA RULE. John R. Spreiter. May 1956. 21p. diagrs. (NACA TN 3673. Supersedes RM A54F28)

COMPARISON BETWEEN EXPERIMENTAL AND PREDICTED DOWNWASH AT A MACH NUMBER OF 0.25 BEHIND A WING-BODY COMBINATION HAVING A TRIANGULAR WING OF ASPECT RATIO 2.0. Norman E. Sorensen and Edward J. Hopkins. May 1956. 29p. diagrs., photos. (NACA TN 3720)

FLIGHT TESTS AT SUPERSONIC SPEEDS TO DETERMINE THE EFFECT OF TAPER ON THE ZERO-LIFT DRAG OF SWEPTBACK LOW-ASPECT-RATIO WINGS. Murray Pittel. June 1956. 20p. diagrs., photos. (NACA TN 3697. Supersedes RM L50F30a)

(1. 2. 2. 2.)
WING VARIABLES

WING-DROPPING CHARACTERISTICS OF SOME STRAIGHT AND SWEPT WINGS AT TRANSONIC SPEEDS AS DETERMINED WITH ROCKET-POWERED MODELS. David G. Stone. May 26, 1950. 12p. diagrs., tab. (NACA RM L50C01)

TABULATED PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS MEASURED ON THE WING OF THE BELL X-1 AIRPLANE IN PULL-UPS AT MACH NUMBERS FROM 0.53 TO 0.99. Ronald J. Knapp and Gertrude V. Wilken. November 1, 1950. 77p. diagrs., photo., 11 tabs. (NACA RM L50H28)

TABULATED PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS MEASURED ON THE WING OF THE BELL X-1 AIRPLANE IN AN UNACCELERATED STALL AND IN PULL-UPS AT MACH NUMBERS OF 0.74, 0.75, 0.94, AND 0.97. Lawrence A. Smith. June 19, 1951. 49p. diagrs., photo., tabs. (NACA RM L51B23)

INVESTIGATION OF THE EFFECTS OF TWIST AND CAMBER ON THE AERODYNAMIC CHARACTERISTICS OF A 50° 38' SWEPTBACK WING OF ASPECT RATIO 2.98. TRANSONIC-BUMP METHOD. Kenneth P. Spreemann and William J. Alford, Jr. August 1951. 33p. diagrs., photos., tab. (NACA RM L51C16)

DAMPING IN ROLL OF STRAIGHT AND 45° SWEPT WINGS OF VARIOUS TAPER RATIOS DETERMINED AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS WITH ROCKET-POWERED MODELS. E. Claude Sanders, Jr. October 1951. 15p. diagrs. (NACA RM L51H14)

DAMPING IN ROLL OF MODELS WITH 45°, 60°, AND 70° DELTA WINGS DETERMINED AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS WITH ROCKET-POWERED MODELS. E. Claude Sanders, Jr. June 1952. 18p. diagrs., photos. (NACA RM L52D22a)

EFFECTS OF HORIZONTAL-TAIL HEIGHT AND A WING LEADING-EDGE MODIFICATION CONSISTING OF A FULL-SPAN FLAP AND A PARTIAL-SPAN CHORD-EXTENSION ON THE AERODYNAMIC CHARACTERISTICS IN PITCH AT HIGH SUBSONIC SPEEDS OF A MODEL WITH A 45° SWEPTBACK WING. William D. Morrison, Jr. and William J. Alford, Jr. June 1953. 37p. diagrs., photo., tab. (NACA RM L53E06)

A COLLECTION OF DATA FOR ZERO-LIFT DAMPING IN ROLL OF WING-BODY COMBINATIONS AS DETERMINED WITH ROCKET-POWERED MODELS EQUIPPED WITH ROLL-TORQUE NOZZLES. David G. Stone. July 1953. 23p. diagrs., tab. (NACA RM L53E26)

THE TRANSONIC AERODYNAMIC CHARACTERISTICS OF STRUCTURALLY RELATED WINGS OF LOW ASPECT RATIO HAVING A SPANWISE VARIATION IN THICKNESS RATIO - TRANSONIC BUMP TECHNIQUE. Joseph W. Cleary. April 1954. 28p. diagrs., photo. (NACA RM A54B18)

A METHOD FOR THE DESIGN OF SWEPTBACK WINGS WARPED TO PRODUCE SPECIFIED FLIGHT CHARACTERISTICS AT SUPERSONIC SPEEDS. Warren A. Tucker. 1955. i, 17p. diagrs., tabs. (NACA Rept. 1226. Supersedes RM L51F08)

INVESTIGATIONS AT SUPERSONIC SPEEDS OF 22 TRIANGULAR WINGS REPRESENTING TWO AIRFOIL SECTIONS FOR EACH OF 11 APEX ANGLES. Eugene S. Love. 1955. ii, 60p. diagrs., photos., tabs. (NACA Rept. 1238. Supersedes RM L9D07)

AN ANALYSIS OF ESTIMATED AND EXPERIMENTAL TRANSONIC DOWNWASH CHARACTERISTICS AS AFFECTED BY PLAN FORM AND THICKNESS FOR WING AND WING-FUSELAGE CONFIGURATIONS. Joseph Weil, George S. Campbell and Margaret S. Diederich. April 1956. 92p. diagrs., photos., tabs. (NACA TN 3628. Supersedes RM L52I22)

(1.2.2.2.1) Profiles

THE HIGH-SPEED AERODYNAMIC EFFECTS OF MODIFICATIONS TO THE WING AND WING-FUSELAGE INTERSECTION OF AN AIRPLANE MODEL WITH THE WING SWEPT BACK 35°. Lee E. Boddy and Charles P. Morrill, Jr. February 18, 1948. 34p. diagrs., photos. (NACA RM A7J02)

A COMPARISON OF THE EXPERIMENTAL AND THEORETICAL LOADING OVER TRIANGULAR WINGS IN SIDESLIP AT SUPERSONIC SPEEDS. John W. Boyd. May 18, 1951. 58p. diagrs., photo., tabs. (NACA RM A51C13)

AN INVESTIGATION OF FOUR WINGS OF SQUARE PLAN FORM AT A MACH NUMBER OF 6.86 IN THE LANGLEY 11-INCH HYPERSONIC TUNNEL. Charles H. McLellan, Mitchel H. Bertram, and John A. Moore. June 1951. 47p. diagrs., photos. (NACA RM L51D17)

CHARACTERISTICS THROUGHOUT THE SUBSONIC SPEED RANGE OF A PLANE WING AND OF A CAMBERED AND TWISTED WING, BOTH HAVING 45° OF SWEEPBACK. Ben H. Johnson, Jr., and Harry H. Shibata. July 1951. 122p. diagrs., photos. (NACA RM A51D27)

THE EFFECT ON ZERO-LIFT DRAG OF AN INDENTED FUSELAGE OR A THICKENED WING-ROOT MODIFICATION TO A 45° SWEPTBACK WING-BODY CONFIGURATION AS DETERMINED BY FLIGHT TESTS AT TRANSONIC SPEEDS. William B. Pepper. September 1951. 20p. diagrs., photos., 2 tabs. (NACA RM L51F15)

AN INVESTIGATION THROUGHOUT THE SUBSONIC SPEED RANGE OF A FULL-SPAN AND A SEMI-SPAN MODEL OF A PLANE WING AND OF A CAMBERED AND TWISTED WING, ALL HAVING 45° OF SWEEPBACK. Harry H. Shibata, Angelo Bandettini, and Joseph Cleary. June 1952. 65p. diagrs., photos. (NACA RM A52D01)

EFFECT OF CAMBER AND TWIST ON THE STABILITY CHARACTERISTICS OF MODELS HAVING A 45° SWEPT WING AS DETERMINED BY THE FREE-FALL METHOD AT TRANSONIC SPEEDS. Maurice D. White. August 1952. 35p. diagrs., photos., tab. (NACA RM A52F16)

TRANSONIC FLIGHT TESTS TO DETERMINE THE EFFECT OF THICKNESS RATIO AND PLAN-FORM MODIFICATION ON THE ZERO-LIFT DRAG OF A 45° SWEPTBACK WING. William B. Pepper, Jr., and Sherwood Hoffman. August 1952. 24p. diagrs., photos., tabs. (NACA RM L52F02a)

FREE-FLIGHT TESTS AT MACH NUMBERS FROM 0.8 TO 1.4 TO DETERMINE THE EFFECT ON ZERO-LIFT DRAG OF INCREASING THE LEADING-EDGE BLUNTNESS OF A 45° SWEPTBACK WING HAVING AN NACA 65A009 AIRFOIL. William B. Pepper, Jr. August 1952. 15p. diagrs., photos., tabs. (NACA RM L52F30)

AN EXPERIMENTAL INVESTIGATION OF THE ZERO-LIFT-DRAG CHARACTERISTICS OF SYMMETRICAL BLUNT-TRAILING-EDGE AIRFOILS AT MACH NUMBERS FROM 2.7 TO 5.0. Clarence A. Syvertson and Hermilo R. Gloria. April 1953. 31p. diagrs., photos., tabs. (NACA RM A53B02)

EFFECT OF REDUCTION IN THICKNESS FROM 6 TO 2 PERCENT AND REMOVAL OF THE POINTED TIPS ON THE SUBSONIC STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A 60° TRIANGULAR WING IN COMBINATION WITH A FUSELAGE. William E. Palmer. August 1953. 44p. diagrs., photo., tab. (NACA RM L53F24)

DETERMINATION OF MEAN CAMBER SURFACES FOR WINGS HAVING UNIFORM CHORDWISE LOADING AND ARBITRARY SPANWISE LOADING IN SUBSONIC FLOW. S. Katzoff, M. Frances Faison and Hugh C. DuBose. 1954. ii, 17p. diagrs., tab. (NACA Rept. 1176. Formerly TN 2908)

STABILITY CHARACTERISTICS AT LOW SPEED OF A VARIABLE-SWEEP AIRPLANE MODEL HAVING A PARTIALLY CAMBERED WING WITH SEVERAL CHORD-EXTENSION CONFIGURATIONS. Robert E. Becht. February 1954. 37p. diagrs., photos. (NACA RM L53L14)

THE TRANSONIC CHARACTERISTICS OF UNSWEPT WINGS HAVING ASPECT RATIOS OF 4, SPANWISE VARIATIONS IN THICKNESS RATIO, AND VARIATIONS IN PLAN-FORM TAPER - TRANSONIC-BUMP TECHNIQUE. Warren H. Nelson. March 1954. 29p. diagrs., photo. (NACA RM A53L17)

EFFECTS OF SWEEP AND THICKNESS ON THE STATIC LONGITUDINAL AERODYNAMIC CHARACTERISTICS OF A SERIES OF THIN, LOW-ASPECT-RATIO, HIGHLY TAPERED WINGS AT TRANSONIC SPEEDS. TRANSONIC-BUMP METHOD. Albert G. Few, Jr., and Paul G. Fournier. April 1954. 107p. diagrs., photo., tab. (NACA RM L54B25)

A CORRELATION BY MEANS OF TRANSONIC SIMILARITY RULES OF EXPERIMENTALLY DETERMINED CHARACTERISTICS OF A SERIES OF SYMMETRICAL AND CAMBERED WINGS OF RECTANGULAR PLAN FORM. John B. McDevitt. 1955. ii, 23p. diagrs., tabs. (NACA Rept. 1253. Supersedes RM A51L17b; RM A53G31)

THE TRANSONIC CHARACTERISTICS OF 22 RECTANGULAR, SYMMETRICAL WING MODELS OF VARYING ASPECT RATIO AND THICKNESS. Warren H. Nelson and John B. McDevitt. June 1955. 109p. diagrs., photos. (NACA TN 3501. Formerly RM A51A12)

THE TRANSONIC CHARACTERISTICS OF 38 CAMBERED RECTANGULAR WINGS OF VARYING ASPECT RATIO AND THICKNESS AS DETERMINED BY THE TRANSONIC-BUMP TECHNIQUE. Warren H. Nelson and Walter J. Krumm. June 1955. 173p. diagrs., photos. (NACA TN 3502. Formerly RM A52D11)

EFFECT OF TRAILING-EDGE THICKNESS ON LIFT AT SUPERSONIC VELOCITIES. Dean R. Chapman and Robert H. Kester. June 1955. 19p. diagrs. (NACA TN 3504. Formerly RM A52D17)

REDUCTION OF PROFILE DRAG AT SUPERSONIC VELOCITIES BY THE USE OF AIRFOIL SECTIONS HAVING A BLUNT TRAILING EDGE. Dean R. Chapman. September 1955. 29p. diagrs., photo. (NACA TN 3503. Supersedes RM A9H11)

SUMMARY OF RESULTS OBTAINED BY TRANSONIC-BUMP METHOD ON EFFECTS OF PLAN FORM AND THICKNESS ON LIFT AND DRAG CHARACTERISTICS OF WINGS AT TRANSONIC SPEEDS. Edward C. Polhamus. November 1955. 33p. diagrs., tab. (NACA TN 3469. Supersedes RM L51H30)

FLIGHT INVESTIGATION AT MACH NUMBERS FROM 0.6 TO 1.7 TO DETERMINE DRAG AND BASE PRESSURES ON A BLUNT-TRAILING-EDGE AIRFOIL AND DRAG OF DIAMOND AND CIRCULAR-ARC AIRFOILS AT ZERO LIFT. John D. Morrow and Ellis Katz. November 1955. 19p. diagrs., photos. (NACA TN 3548. Supersedes RM L50E19a)

MEASUREMENTS OF THE EFFECT OF TRAILING-EDGE THICKNESS ON THE ZERO-LIFT DRAG OF THIN LOW-ASPECT-RATIO WINGS. John D. Morrow. November 1955. 11p. diagrs., photo. (NACA TN 3550. Supersedes RM L50F26)

THE TRANSONIC CHARACTERISTICS OF 36 SYMMETRICAL WINGS OF VARYING TAPER, ASPECT RATIO, AND THICKNESS AS DETERMINED BY THE TRANSONIC-BUMP TECHNIQUE. Warren H. Nelson, Edwin C. Allen, and Walter J. Krumm. December 1955. 131p. diagrs., photo. (NACA TN 3529. Supersedes RM A53I29)

WIND-TUNNEL INVESTIGATION OF THE EFFECT OF CLIPPING THE TIPS OF TRIANGULAR WINGS OF DIFFERENT THICKNESS, CAMBER, AND ASPECT RATIO - TRANSONIC BUMP METHOD. Horace F. Emerson. June 1956. 183p. diagrs., photo., tabs. (NACA TN 3671. Supersedes RM A53L03)

(1.2.2.2.2) Aspect Ratio

FREE-FLIGHT INVESTIGATION OF CONTROL EFFECTIVENESS OF FULL-SPAN, 0.2-CHORD PLAIN AILERONS AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS TO DETERMINE SOME EFFECTS OF WING SWEEPBACK, TAPER, ASPECT RATIO, AND SECTION-THICKNESS RATIO. Carl A. Sandahl. August 13, 1947. 16p. diagrs., photos., tab. (NACA RM L7F30)

LIFT AND PITCHING-MOMENT INTERFERENCE BETWEEN A POINTED CYLINDRICAL BODY AND TRIANGULAR WINGS OF VARIOUS ASPECT RATIOS AT MACH NUMBERS OF 1.50 AND 2.02. Jack N. Nielsen, Elliott D. Katzen, and Kenneth K. Tang. September 12, 1950. 53p. diagrs., photos., tabs. (NACA RM A50F06)

AERODYNAMIC CHARACTERISTICS INCLUDING PRESSURE DISTRIBUTIONS OF A FUSELAGE AND THREE COMBINATIONS OF THE FUSELAGE WITH SWEPT-BACK WINGS AT HIGH SUBSONIC SPEEDS. Fred B. Sutton and Andrew Martin. February 6, 1951. 117p. diagrs., photos., tabs. (NACA RM A50J26a)

DRAG INTERFERENCE BETWEEN A POINTED CYLINDRICAL BODY AND TRIANGULAR WINGS OF VARIOUS ASPECT RATIOS AT MACH NUMBERS OF 1.50 AND 2.02. Elliott D. Katzen and George E. Kaattari. May 23, 1951. 45p. diagrs., photos., tabs. (NACA RM A51C27)

RECENT EXPERIMENTAL FLUTTER STUDIES. Arthur A. Regier and Dennis J. Martin. June 12, 1951. 18p. diagrs. (NACA RM L51F11)

WIND-TUNNEL INVESTIGATION OF THE AERODYNAMIC CHARACTERISTICS IN PITCH OF WING-FUSELAGE COMBINATIONS AT HIGH SUBSONIC SPEEDS. ASPECT-RATIO SERIES. Richard E. Kuhn and James W. Wiggins. April 1952. 42p. diagrs., photos., tab. (NACA RM L52A29)

PRELIMINARY RESULTS OF HORIZONTAL-TAIL LOAD MEASUREMENTS OF THE BELL X-5 RESEARCH AIRPLANE. John T. Rogers and Angel H. Dunn. August 15, 1952. 22p. diagrs., photos., tabs. (NACA RM L52G14)

(1) AERODYNAMICS

INVESTIGATION OF THE LOW-SPEED AERODYNAMIC CHARACTERISTICS OF A VARIABLE-SWEEP AIRPLANE MODEL WITH A WING HAVING PARTIAL-SPAN CAMBERED-LEADING-EDGE MODIFICATIONS. Robert E. Becht and Andrew L. Byrnes, Jr. September 1952. 47p. diagrs., photos. (NACA RM L52G08a)

WIND-TUNNEL INVESTIGATION OF THE STATIC LATERAL STABILITY CHARACTERISTICS OF WING-FUSELAGE COMBINATIONS AT HIGH SUBSONIC SPEEDS. ASPECT-RATIO SERIES. Paul G. Fournier and Andrew L. Byrnes, Jr. February 1953. 26p. diagrs., photos. (NACA RM L52L18)

INVESTIGATIONS OF THE DAMPING IN ROLL OF SWEPT AND TAPERED WINGS AT SUPERSONIC SPEEDS. Russell W. McDearmon and Harry S. Heinke, Jr. March 1953. 35p. diagrs., photos., tab. (NACA RM L53A13)

EXPERIMENTAL INVESTIGATION OF THE EFFECTS OF PLAN-FORM TAPER ON THE AERODYNAMIC CHARACTERISTICS OF SYMMETRICAL UNSWEPT WINGS OF VARYING ASPECT RATIO. Edwin C. Allen. May 1953. 53p. diagrs., photos., tab. (NACA RM A53C19)

THE LOW-SPEED LIFT AND DRAG CHARACTERISTICS OF A SERIES OF AIRPLANE MODELS HAVING TRIANGULAR OR MODIFIED TRIANGULAR WINGS. David Graham. June 1953. 49p. diagrs., photo., tabs. (NACA RM A53D14)

EFFECT OF REDUCTION IN THICKNESS FROM 6 TO 2 PERCENT AND REMOVAL OF THE POINTED TIPS ON THE SUBSONIC STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A 60° TRIANGULAR WING IN COMBINATION WITH A FUSELAGE. William E. Palmer. August 1953. 44p. diagrs., photo., tab. (NACA RM L53F24)

A STUDY OF THE PROBLEM OF DESIGNING AIRPLANES WITH SATISFACTORY INHERENT DAMPING OF THE DUTCH ROLL OSCILLATION. John P. Campbell and Marion O. McKinney, Jr. 1954. ii, 18p. diagrs., tabs. (NACA Rept. 1199. Supersedes TN 3035)

STABILITY CHARACTERISTICS AT LOW SPEED OF A VARIABLE-SWEEP AIRPLANE MODEL HAVING A PARTIALLY CAMBERED WING WITH SEVERAL CHORD-EXTENSION CONFIGURATIONS. Robert E. Becht. February 1954. 37p. diagrs., photos. (NACA RM L53L14)

EFFECTS OF SWEEP AND THICKNESS ON THE STATIC LONGITUDINAL AERODYNAMIC CHARACTERISTICS OF A SERIES OF THIN, LOW-ASPECT-RATIO, HIGHLY TAPERED WINGS AT TRANSONIC SPEEDS. TRANSONIC-BUMP METHOD. Albert G. Few, Jr., and Paul G. Fournier. April 1954. 107p. diagrs., photo., tab. (NACA RM L54B25)

CALCULATED SPANWISE LIFT DISTRIBUTIONS, INFLUENCE FUNCTIONS, AND INFLUENCE COEFFICIENTS FOR UNSWEPT WINGS IN SUBSONIC FLOW. Franklin W. Diederich and Martin Zlotnick. 1955. ii, 69p. diagrs., tabs. (NACA Rept. 1228. Supersedes TN 3014)

A CORRELATION BY MEANS OF TRANSONIC SIMILARITY RULES OF EXPERIMENTALLY DETERMINED CHARACTERISTICS OF A SERIES OF SYMMETRICAL AND CAMBERED WINGS OF RECTANGULAR PLAN FORM. John B. McDevitt. 1955. ii, 23p. diagrs., tabs. (NACA Rept. 1253. Supersedes RM A51L17b; RM A53G31)

WING-LOAD MEASUREMENTS OF THE BELL X-5 RESEARCH AIRPLANE AT A SWEEP ANGLE OF 58.7°. Richard D. Banner, Robert D. Reed, and William L. Marcy. April 1955. 22p. diagrs., photo., tab. (NACA RM H55A11)

THE TRANSONIC CHARACTERISTICS OF 22 RECTANGULAR, SYMMETRICAL WING MODELS OF VARYING ASPECT RATIO AND THICKNESS. Warren H. Nelson and John B. McDevitt. June 1955. 109p. diagrs., photos. (NACA TN 3501. Formerly RM A51A12)

THE TRANSONIC CHARACTERISTICS OF 38 CAMBERED RECTANGULAR WINGS OF VARYING ASPECT RATIO AND THICKNESS AS DETERMINED BY THE TRANSONIC-BUMP TECHNIQUE. Warren H. Nelson and Walter J. Krumm. June 1955. 173p. diagrs., photos. (NACA TN 3502. Formerly RM A52D11)

EFFECT OF TRAILING-EDGE THICKNESS ON LIFT AT SUPERSONIC VELOCITIES. Dean R. Chapman and Robert H. Kester. June 1955. 19p. diagrs. (NACA TN 3504. Formerly RM A52D17)

FLOW STUDIES ON FLAT-PLATE DELTA WINGS AT SUPERSONIC SPEED. William H. Michael, Jr. July 1955. 40p. diagrs., photos. (NACA TN 3472)

SUMMARY OF RESULTS OF A WIND-TUNNEL INVESTIGATION OF NINE RELATED HORIZONTAL TAILS. Jules B. Dods, Jr. and Bruce E. Tinling. July 1955. 105p. diagrs., 2 tabs. (NACA TN 3497. Formerly RM A51G31a)

CORRECTION OF ADDITIONAL SPAN LOADINGS COMPUTED BY THE WEISSINGER SEVEN-POINT METHOD FOR MODERATELY TAPERED WINGS OF HIGH ASPECT RATIO. John DeYoung and Walter H. Barling, Jr. July 1955. 31p. diagrs. (NACA TN 3500)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF EFFECT OF SIZE AND POSITION OF CLOSED AIR DUCTS ON STATIC LONGITUDINAL AND STATIC LATERAL STABILITY CHARACTERISTICS OF UNSWEPT-MIDWING MODELS HAVING WINGS OF ASPECT RATIO 2, 4, AND 6. Byron M. Jaquet and James L. Williams. September 1955. 45p. diagrs., photos., tabs. (NACA TN 3481)

MEASUREMENTS OF THE EFFECTS OF FINITE SPAN ON THE PRESSURE DISTRIBUTION OVER DOUBLE-WEDGE WINGS AT MACH NUMBERS NEAR SHOCK ATTACHMENT. Walter G. Vincenti. September 1955. 50p. diagrs. (NACA TN 3522)

CALCULATED SPANWISE LIFT DISTRIBUTIONS AND AERODYNAMIC INFLUENCE COEFFICIENTS FOR SWEPT WINGS IN SUBSONIC FLOW. Franklin W. Diederich and Martin Zlotnick. October 1955. 173p. diagrs., tabs. (NACA TN 3476)

SUMMARY OF RESULTS OBTAINED BY TRANSONIC-BUMP METHOD ON EFFECTS OF PLAN FORM AND THICKNESS ON LIFT AND DRAG CHARACTERISTICS OF WINGS AT TRANSONIC SPEEDS. Edward C. Polhamus. November 1955. 33p. diagrs., tab. (NACA TN 3469. Supersedes RM L51H30)

THE TRANSONIC CHARACTERISTICS OF 36 SYMMETRICAL WINGS OF VARYING TAPER, ASPECT RATIO, AND THICKNESS AS DETERMINED BY THE TRANSONIC-BUMP TECHNIQUE. Warren H. Nelson, Edwin C. Allen, and Walter J. Krumm. December 1955. 131p. diagrs., photo. (NACA TN 3529. Supersedes RM A53I29)

THEORETICAL SPAN LOAD DISTRIBUTIONS AND ROLLING MOMENTS FOR SIDESLIPPING WINGS OF ARBITRARY PLAN FORM IN INCOMPRESSIBLE FLOW. M. J. Queijo. December 1955. 45p. diagrs. (NACA TN 3605)

FLOW STUDIES ON DROOPED-LEADING-EDGE DELTA WINGS AT SUPERSONIC SPEED. William H. Michael, Jr. January 1956. 29p. diagrs., photos. (NACA TN 3614)

PRELIMINARY STUDY OF SOME FACTORS WHICH AFFECT THE STALL-FLUTTER CHARACTERISTICS OF THIN WINGS. A. Gerald Rainey. March 1956. 33p. diagrs., photo., tab. (NACA TN 3622. Supersedes RM L52D08)

AN ANALYSIS OF ESTIMATED AND EXPERIMENTAL TRANSONIC DOWNWASH CHARACTERISTICS AS AFFECTED BY PLAN FORM AND THICKNESS FOR WING AND WING-FUSELAGE CONFIGURATIONS. Joseph Weil, George S. Campbell and Margaret S. Diederich. April 1956. 92p. diagrs., photos., tabs. (NACA TN 3628. Supersedes RM L52I22)

APPROXIMATE INDICIAL LIFT FUNCTIONS FOR SEVERAL WINGS OF FINITE SPAN IN INCOMPRESSIBLE FLOW AS OBTAINED FROM OSCILLATORY LIFT COEFFICIENTS. Joseph A. Drischler. May 1956. 26p. diagrs., tab. (NACA TN 3639)

STATIC LONGITUDINAL AND LATERAL STABILITY CHARACTERISTICS AT LOW SPEED OF UNSWEPT-MIDWING MODELS HAVING WINGS WITH AN ASPECT RATIO OF 2, 4, OR 6. Walter D. Wolhart and David F. Thomas, Jr. May 1956. 41p. diagrs., photos., tabs. (NACA TN 3649)

ON THE RANGE OF APPLICABILITY OF THE TRANSONIC AREA RULE. John R. Spreiter. May 1956. 21p. diagrs. (NACA TN 3673. Supersedes RM A54F28)

WIND-TUNNEL INVESTIGATION OF THE EFFECT OF CLIPPING THE TIPS OF TRIANGULAR WINGS OF DIFFERENT THICKNESS, CAMBER, AND ASPECT RATIO - TRANSONIC BUMP METHOD. Horace F. Emerson. June 1956. 193p. diagrs., photo., tabs. (NACA TN 3671. Supersedes RM A53L03)

FLIGHT TESTS AT SUPERSONIC SPEEDS TO DETERMINE THE EFFECT OF TAPER ON THE ZERO-LIFT DRAG OF SWEPTBACK LOW-ASPECT-RATIO WINGS. Murray Pittel. June 1956. 20p. diagrs., photos. (NACA TN 3697. Supersedes RM L50F30a)

PRELIMINARY WIND-TUNNEL TESTS OF TRIANGULAR AND RECTANGULAR WINGS IN STEADY ROLL AT MACH NUMBERS OF 1.62 AND 1.92. Clinton E. Brown and Harry S. Heinke, Jr. June 1956. 36p. diagrs., tabs. (NACA TN 3740. Supersedes RM L8L30)

(1.2.2.2.3) Sweep

FREE-FLIGHT INVESTIGATION OF CONTROL EFFECTIVENESS OF FULL-SPAN, 0.2-CHORD PLAIN AILERONS AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS TO DETERMINE SOME EFFECTS OF WING SWEEPBACK, TAPER, ASPECT RATIO, AND SECTION-THICKNESS RATIO. Carl A. Sandahl. August 13, 1947. 16p. diagrs., photos., tab. (NACA RM L7F30)

THE HIGH-SPEED AERODYNAMIC EFFECTS OF MODIFICATIONS TO THE WING AND WING-FUSELAGE INTERSECTION OF AN AIRPLANE MODEL WITH THE WING SWEPT BACK 35°. Lee E. Boddy and Charles P. Morrill, Jr. February 18, 1948. 34p. diagrs., photos. (NACA RM A7J02)

HIGH-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A FIGHTER AIRPLANE MODEL WITH A SWEPT-BACK WING AND TAIL. Charles P. Morrill, Jr., and Lee E. Boddy. April 14, 1948. 47p. diagrs., photos. (NACA RM A7K28)

LONGITUDINAL-STABILITY INVESTIGATION OF HIGH-LIFT AND STALL-CONTROL DEVICES ON A 52° SWEPTBACK WING WITH AND WITHOUT FUSELAGE AND HORIZONTAL TAIL AT A REYNOLDS NUMBER OF 6.8×10^6. Gerald V. Foster and James E. Fitzpatrick. December 20, 1948. 41p. diagrs., photos., tabs. (NACA RM L8I08)

HIGH-SPEED WIND-TUNNEL INVESTIGATION OF A SWEPTBACK WING WITH AN ADDED TRIANGULAR AREA AT THE CENTER. Beverly Z. Henry, Jr. January 14, 1949. 24p. diagrs., tabs. (NACA RM L8J12)

(1) AERODYNAMICS

AERODYNAMIC STUDY OF A WING-FUSELAGE COMBINATION EMPLOYING A WING SWEPT BACK 63°. - AERODYNAMIC CHARACTERISTICS IN SIDESLIP OF A LARGE-SCALE MODEL HAVING A 63° SWEPT-BACK VERTICAL TAIL. Gerald M. McCormack. October 7, 1949. 26p. diagrs., photos. (NACA RM A9F14)

A TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. WING-FUSELAGE CONFIGURATION WITH A WING OF 45° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Robert S. Osborne. October 10, 1950. 49p. diagrs., photos. (NACA RM L50H08)

A TRANSONIC WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. WING-FUSELAGE CONFIGURATION HAVING A WING OF 35° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Beverly Z. Henry, Jr. November 15, 1950. 40p. diagrs., photo., tab. (NACA RM L50J09)

HORIZONTAL-TAIL EFFECTIVENESS AND DOWNWASH SURVEYS FOR TWO 47.7° SWEPTBACK WING-FUSELAGE COMBINATIONS WITH ASPECT RATIOS OF 5.1 AND 6.0 AT A REYNOLDS NUMBER OF 6.0×10^6. Reino J. Salmi. January 12, 1951. 65p. diagrs., photos., 2 tabs. (NACA RM L50K06)

A TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. WING-FUSELAGE CONFIGURATION HAVING A WING OF 60° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Raymond B. Wood and Frank F. Fleming. January 24, 1951. 43p. diagrs., photo. (NACA RM L50J25)

AERODYNAMIC CHARACTERISTICS INCLUDING PRESSURE DISTRIBUTIONS OF A FUSELAGE AND THREE COMBINATIONS OF THE FUSELAGE WITH SWEPT-BACK WINGS AT HIGH SUBSONIC SPEEDS. Fred B. Sutton and Andrew Martin. February 6, 1951. 117p. diagrs., photos., tabs. (NACA RM A50J26a)

LOW-SPEED LONGITUDINAL AND WAKE AIRFLOW CHARACTERISTICS AT A REYNOLDS NUMBER OF 6.0×10^6 OF A 52° SWEPTBACK WING EQUIPPED WITH VARIOUS SPANS OF LEADING-EDGE AND TRAILING-EDGE FLAPS, A FUSELAGE, AND A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS. Roland F. Griner and Gerald V. Foster. February 28, 1951. 66p. diagrs., photo., 3 tabs. (NACA RM L50K29)

SOME EXPERIMENTS ON THE FLUTTER OF SWEPTBACK CANTILEVER WING MODELS AT MACH NUMBER 1.3. W. J. Tuovila. March 15, 1951. 10p. diagrs., tab. (NACA RM L51A11)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 2 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LONGITUDINAL CHARACTERISTICS. David Graham and David G. Koenig. April 23, 1951. 35p. diagrs., photo., 3 tabs. (NACA RM A51B21)

SOME EFFECTS OF SPANWISE AILERON LOCATION AND WING STRUCTURAL RIGIDITY ON THE ROLLING EFFECTIVENESS OF 0.3-CHORD FLAP-TYPE AILERONS ON A TAPERED WING HAVING 63° SWEEPBACK AT THE LEADING EDGE AND NACA 64A005 AIRFOIL SECTIONS. H. Kurt Strass, E. M. Fields, and Eugene D. Schult. June 1951. 25p. diagrs., photo., tab. (NACA RM L51D18a)

COMPARISON OF ZERO-LIFT DRAG DETERMINED BY FLIGHT TESTS AT TRANSONIC SPEEDS OF PYLON, UNDERSLUNG, AND SYMMETRICALLY MOUNTED NACELLES AT 40 PERCENT SEMISPAN OF A 45° SWEPTBACK WING AND BODY COMBINATION. Sherwood Hoffman. June 1951. 18p. diagrs., photos., tabs. (NACA RM L51D26)

AERODYNAMIC CHARACTERISTICS OF FOUR WINGS OF SWEEPBACK ANGLES 0°, 35°, 45°, AND 60°, NACA 65A006 AIRFOIL SECTION, ASPECT RATIO 4, AND TAPER RATIO 0.6 IN COMBINATION WITH A FUSELAGE AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. Arvo A. Luoma. June 6, 1951. 59p. diagrs., photo., tab. (NACA RM L51D13)

RECENT EXPERIMENTAL FLUTTER STUDIES. Arthur A. Regier and Dennis J. Martin. June 12, 1951. 18p. diagrs. (NACA RM L51F11)

LOW-SPEED LONGITUDINAL AND WAKE AIRFLOW CHARACTERISTICS AT A REYNOLDS NUMBER OF 5.5×10^6 OF A CIRCULAR-ARC 52° SWEPTBACK WING WITH A FUSELAGE AND A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS. Gerald V. Foster and Roland F. Griner. June 19, 1951. 44p. diagrs., tabs. (NACA RM L51C30)

CHARACTERISTICS THROUGHOUT THE SUBSONIC SPEED RANGE OF A PLANE WING AND OF A CAMBERED AND TWISTED WING, BOTH HAVING 45° OF SWEEPBACK. Ben H. Johnson, Jr., and Harry H. Shibata. July 1951. 122p. diagrs., photos. (NACA RM A51D27)

INVESTIGATION OF THE EFFECTS OF TWIST AND CAMBER ON THE AERODYNAMIC CHARACTERISTICS OF A 50° 38' SWEPTBACK WING OF ASPECT RATIO 2.98. TRANSONIC-BUMP METHOD. Kenneth P. Spreemann and William J. Alford, Jr. August 1951. 33p. diagrs., photos., tab. (NACA RM L51C16)

TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. ANALYSIS OF PRESSURE DISTRIBUTION OF WING-FUSELAGE CONFIGURATION HAVING A WING OF 45° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Donald L. Loving and Bruce B. Estabrooks. September 1951. 132p. diagrs., photos. (NACA RM L51F07)

COMPARISON OF ZERO-LIFT DRAGS DETERMINED BY FLIGHT TESTS AT TRANSONIC SPEEDS OF SYMMETRICALLY MOUNTED NACELLES IN VARIOUS CHORDWISE POSITIONS AT THE WING TIP OF A 45° SWEPTBACK WING AND BODY COMBINATION. William B. Pepper, Jr., and Sherwood Hoffman. September 1951. 16p. diagrs., photos. (NACA RM L51F13)

THE EFFECT ON ZERO-LIFT DRAG OF AN INDENTED FUSELAGE OR A THICKENED WING-ROOT MODIFICATION TO A 45° SWEPTBACK WING-BODY CONFIGURATION AS DETERMINED BY FLIGHT TESTS AT TRANSONIC SPEEDS. William B. Pepper. September 1951. 20p. diagrs., photos., 2 tabs. (NACA RM L51F15)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 4 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LONGITUDINAL CHARACTERISTICS. David Graham and David G. Koenig. October 1951. 27p. diagrs., photo., 4 tabs. (NACA RM A51H10a)

SOME EFFECTS OF FUSELAGE INTERFERENCE, WING INTERFERENCE AND SWEEPBACK ON THE DAMPING IN ROLL OF UNTAPERED WINGS AS DETERMINED BY TECHNIQUES EMPLOYING ROCKET-PROPELLED VEHICLES. William M. Bland, Jr., and Albert E. Dietz. October 1951. 27p. diagrs., photos. (NACA RM L51D25)

ROLLING EFFECTIVENESS OF ALL-MOVABLE WINGS AT SMALL ANGLES OF INCIDENCE AT MACH NUMBERS FROM 0.6 TO 1.6. H. Kurt Strass and Edward T. Marley. October 1951. 16p. diagrs., photo., tab. (NACA RM L51H03)

DYNAMIC STABILITY AND CONTROL CHARACTERISTICS OF A DELTA-WING VERTICALLY RISING AIRPLANE MODEL IN TAKE-OFFS, LANDINGS, AND HOVERING FLIGHT. Powell M. Lovell, Jr., William R. Bates and Charles C. Smith, Jr. October 1951. 14p. diagrs., photo., tab. (NACA RM L51H13a)

DAMPING IN ROLL OF STRAIGHT AND 45° SWEPT WINGS OF VARIOUS TAPER RATIOS DETERMINED AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS WITH ROCKET-POWERED MODELS. E. Claude Sanders, Jr. October 1951. 15p. diagrs. (NACA RM L51H14)

EFFECT OF VERTICAL LOCATION OF A HORIZONTAL TAIL ON THE STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A 45° SWEPTBACK-WING - FUSELAGE COMBINATION OF ASPECT RATIO 8 AT A REYNOLDS NUMBER OF 4.0×10^6. Reino J. Salmi and William A. Jacques. January 1952. 42p. diagrs., photos. (NACA RM L51J08)

TRANSONIC FLIGHT TESTS TO DETERMINE ZERO-LIFT DRAG AND PRESSURE RECOVERY OF NACELLES LOCATED AT THE WING TIPS ON A 45° SWEPTBACK WING AND BODY COMBINATION. Sherwood Hoffman and William B. Pepper, Jr. January 1952. 21p. diagrs., photos., tabs. (NACA RM L51K02)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 2 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LATERAL CHARACTERISTICS. David Graham and David G. Koenig. February 1952. 38p. diagrs., 2 tabs. (NACA RM A51L03)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF A TWISTED AND CAMBERED WING SWEPT BACK 63° WITH VORTEX GENERATORS AND FENCES. James A. Weiberg and George B. McCullough. March 1952. 45p. diagrs., photos., 3 tabs. (NACA RM A52A17)

SOME WIND-TUNNEL RESULTS OF AN INVESTIGATION OF THE FLUTTER OF SWEPTBACK- AND TRIANGULAR-WING MODELS AT MACH NUMBER 1.3. W. J. Tuovila. May 1952. 12p. diagrs., tab. (NACA RM L52C13)

THE EFFECTS OF REYNOLDS NUMBER AT MACH NUMBERS UP TO 0.94 ON THE LOADING ON A 35° SWEPTBACK WING HAVING NACA 65_1A012 STREAMWISE SECTIONS. Bruce E. Tinling and Armando E. Lopez. June 1952. 115p. diagrs., photos., tabs. (NACA RM A52B20)

AN INVESTIGATION THROUGHOUT THE SUBSONIC SPEED RANGE OF A FULL-SPAN AND A SEMI-SPAN MODEL OF A PLANE WING AND OF A CAMBERED AND TWISTED WING, ALL HAVING 45° OF SWEEPBACK. Harry H. Shibata, Angelo Bandettini, and Joseph Cleary. June 1952. 65p. diagrs., photos. (NACA RM A52D01)

A STUDY OF THE FLOW OVER A 45° SWEPTBACK WING-FUSELAGE COMBINATION AT TRANSONIC MACH NUMBERS. Richard T. Whitcomb and Thomas C. Kelly. June 1952. 60p. diagrs., photos. (NACA RM L52D01)

WIND-TUNNEL INVESTIGATION OF THE AERODYNAMIC CHARACTERISTICS IN PITCH OF WING-FUSELAGE COMBINATIONS AT HIGH-SUBSONIC SPEEDS. SWEEP SERIES. James W. Wiggins and Richard E. Kuhn. July 1952. 41p. diagrs., photos. (NACA RM L52D18)

RESULTS OF TWO EXPERIMENTS ON FLUTTER OF HIGH-ASPECT-RATIO SWEPT WINGS IN THE TRANSONIC SPEED RANGE. W. T. Lauten, Jr., and Burke R. O'Kelly. July 1952. 22p. diagrs., photos., tabs. (NACA RM L52D24b)

PRELIMINARY RESULTS OF HORIZONTAL-TAIL LOAD MEASUREMENTS OF THE BELL X-5 RESEARCH AIRPLANE. John T. Rogers and Angel H. Dunn. August 15, 1952. 22p. diagrs., photos., tabs. (NACA RM L52G14)

THE LONGITUDINAL CHARACTERISTICS AT MACH NUMBERS UP TO 0.92 OF A CAMBERED AND TWISTED WING HAVING 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. George G. Edwards, Bruce E. Tinling, and Arthur C. Ackerman. September 1952. 71p. diagrs., photos., tab. (NACA RM A52F18)

THE USE OF LEADING-EDGE AREA SUCTION TO INCREASE THE MAXIMUM LIFT COEFFICIENT OF A 35° SWEPT-BACK WING. Curt A. Holzhauser and Robert K. Martin. September 1952. 37p. diagrs., photo., 3 tabs. (NACA RM A52G17)

INVESTIGATION OF THE LOW-SPEED AERODYNAMIC CHARACTERISTICS OF A VARIABLE-SWEEP AIRPLANE MODEL WITH A WING HAVING PARTIAL-SPAN CAMBERED-LEADING-EDGE MODIFICATIONS. Robert E. Becht and Andrew L. Byrnes, Jr. September 1952. 47p. diagrs., photos. (NACA RM L52G08a)

THE EFFECTS OF SWEEPBACK ON LONGITUDINAL CHARACTERISTICS OF A 1/30-SCALE SEMISPAN MODEL OF THE BELL X-5 AIRPLANE AS DETERMINED FROM NACA WING-FLOW TESTS AT TRANSONIC SPEEDS. Joseph J. Kolnick and Robert M. Kennedy. November 1952. 48p. diagrs., photos., tab. (NACA RM L52I23)

EFFECTS OF TWIST AND CAMBER, FENCES, AND HORIZONTAL-TAIL HEIGHT ON THE LOW-SPEED LONGITUDINAL STABILITY CHARACTERISTICS OF A WING-FUSELAGE COMBINATION WITH A 45° SWEPTBACK WING OF ASPECT RATIO 8 AT A REYNOLDS NUMBER OF 4.0×10^6. Gerald V. Foster. December 1952. 30p. diagrs., photo. (NACA RM L52J03)

LONGITUDINAL-CONTROL EFFECTIVENESS AND DOWNWASH CHARACTERISTICS AT TRANSONIC SPEEDS OF A 1/30-SCALE SEMISPAN MODEL OF THE BELL X-5 AIRPLANE AS DETERMINED BY THE NACA WING-FLOW METHOD. Norman S. Silsby and Garland J. Morris. January 1953. 48p. diagrs., photos., 2 tabs. (NACA RM L52K12)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE MODEL WITH AN ASPECT RATIO 4 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - HIGH-LIFT DEVICES AND LATERAL CONTROLS. Ralph W. Franks. February 1953. 45p. diagrs., photo., 2 tabs. (NACA RM A52K13)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF TWO AIRPLANE MODELS HAVING ASPECT RATIO 2 TRAPEZOIDAL WINGS OF TAPER RATIOS 0.33 AND 0.20. Ralph W. Franks. February 1953. 56p. diagrs., photos., 3 tabs. (NACA RM A52L16)

PRELIMINARY RESULTS OF STABILITY AND CONTROL INVESTIGATION OF THE BELL X-5 RESEARCH AIRPLANE. Thomas W. Finch and Donald W. Briggs. February 1953. 35p. diagrs., photos., tabs. (NACA RM L52K18b)

WIND-TUNNEL INVESTIGATION OF THE STATIC LATERAL STABILITY CHARACTERISTICS OF WING-FUSELAGE COMBINATIONS AT HIGH SUBSONIC SPEEDS. ASPECT-RATIO SERIES. Paul G. Fournier and Andrew L. Byrnes, Jr. February 1953. 26p. diagrs., photos. (NACA RM L52L18)

FLIGHT DETERMINATION OF THE STATIC LONGITUDINAL STABILITY BOUNDARIES OF THE BELL X-5 RESEARCH AIRPLANE WITH 59° SWEEPBACK. Thomas W. Finch and Joseph A. Walker. February 1953. 51p. diagrs., photo., tab. (NACA RM L53A09b)

LIFT AND DRAG CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 59° SWEEPBACK FOR MACH NUMBERS FROM 0.60 TO 1.03. Donald R. Bellman. February 1953. 37p. diagrs., photos., tab. (NACA RM L53A09c)

PRESSURE DISTRIBUTION AT MACH NUMBERS UP TO 0.90 ON A CAMBERED AND TWISTED WING HAVING 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10, INCLUDING THE EFFECTS OF FENCES. Frederick W. Boltz and Harry H. Shibata. March 1953. 133p. diagrs., photos., tabs. (NACA RM A52K20)

WIND-TUNNEL INVESTIGATION OF STALL CONTROL BY SUCTION THROUGH A POROUS LEADING EDGE ON A 37° SWEPTBACK WING OF ASPECT RATIO 6 AT REYNOLDS NUMBERS FROM 2.50×10^6 to 8.10×10^6. Robert R. Graham and William A. Jacques. March 1953. 67p. diagrs., photo., 2 tabs. (NACA RM L52L05)

INVESTIGATIONS OF THE DAMPING IN ROLL OF SWEPT AND TAPERED WINGS AT SUPERSONIC SPEEDS. Russell W. McDearmon and Harry S. Heinke, Jr. March 1953. 35p. diagrs., photos., tab. (NACA RM L53A13)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 3 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LONGITUDINAL AND LATERAL CHARACTERISTICS. David G. Koenig. April 1953. 61p. diagrs., photos., 4 tabs. (NACA RM A52L15)

THE EFFECT AT HIGH SUBSONIC SPEEDS OF A FLAP-TYPE AILERON ON THE CHORDWISE PRESSURE DISTRIBUTION NEAR MIDSEMISPAN OF A TAPERED 35° SWEPTBACK WING OF ASPECT RATIO 4 HAVING NACA 65A006 AIRFOIL SECTION. Alexander D. Hammond and Barbara M. Keffer. May 1953. 89p. diagrs., tab. (NACA RM L53C23)

THE LOW-SPEED LIFT AND DRAG CHARACTERISTICS OF A SERIES OF AIRPLANE MODELS HAVING TRIANGULAR OR MODIFIED TRIANGULAR WINGS. David Graham. June 1953. 49p. diagrs., photo., tabs. (NACA RM A53D14)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH A VARIABLE-INCIDENCE TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL. David G. Koenig. June 1953. 42p. diagrs., photo., tabs. (NACA RM A53D21)

LONGITUDINAL STABILITY AND WAKE-FLOW CHARACTERISTICS OF A TWISTED AND CAMBERED WING-FUSELAGE COMBINATION OF 45° SWEEPBACK AND ASPECT RATIO 8 WITH A HORIZONTAL TAIL AND STALL-CONTROL DEVICES AT A REYNOLDS NUMBER OF 4.0×10^6 Gerald V. Foster. June 1953. 51p. diagrs., photos., tab. (NACA RM L53D08)

EFFECTS OF HORIZONTAL-TAIL HEIGHT AND A WING LEADING-EDGE MODIFICATION CONSISTING OF A FULL-SPAN FLAP AND A PARTIAL-SPAN CHORD-EXTENSION ON THE AERODYNAMIC CHARACTERISTICS IN PITCH AT HIGH SUBSONIC SPEEDS OF A MODEL WITH A 45° SWEPTBACK WING. William D. Morrison, Jr. and William J. Alford, Jr. June 1953. 37p. diagrs., photo., tab. (NACA RM L53E06)

WIND-TUNNEL INVESTIGATION OF THE EFFECTS OF GEOMETRIC DIHEDRAL ON THE AERODYNAMIC CHARACTERISTICS IN PITCH AND SIDESLIP OF AN UNSWEPT- AND A 45° SWEPTBACK-WING-FUSELAGE COMBINATION AT HIGH SUBSONIC SPEEDS. Richard E. Kuhn and John W. Draper. July 1953. 41p. diagrs., photos. (NACA RM L53F09)

THE EFFECTS OF LEADING-EDGE EXTENSIONS, A TRAILING-EDGE EXTENSION, AND A FENCE ON THE STATIC LONGITUDINAL STABILITY OF A WING-FUSELAGE-TAIL COMBINATION HAVING A WING WITH 35° OF SWEEPBACK AND AN ASPECT RATIO OF 4.5. Ralph Selan and Angelo Bandettini. August 1953. 81p. diagrs., photos., tabs. (NACA RM A53E12)

THE EFFECTS OF FENCES ON THE HIGH-SPEED LONGITUDINAL STABILITY OF A SWEPT-WING AIRPLANE. Richard S. Bray. August 1953. 37p. diagrs., photos., tabs. (NACA RM A53F23)

A TRANSONIC WIND-TUNNEL INVESTIGATION OF THE LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF A 0.09-SCALE MODEL OF THE BELL X-5 RESEARCH AIRPLANE AND COMPARISON WITH FLIGHT. Ralph P. Bielat and George S. Campbell. October 1953. 65p. diagrs., photo. (NACA RM L53H18)

LOW-SPEED WIND-TUNNEL INVESTIGATION OF A JET CONTROL ON A 35° SWEPT WING. John G. Lowry and Thomas R. Turner. October 1953. 9p. diagrs. (NACA RM L53I09a)

FREE-FLIGHT-TUNNEL INVESTIGATION OF THE LOW-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A CANARD AIRPLANE MODEL. Joseph L. Johnson, Jr., and John W. Paulson. October 1953. 37p. diagrs., photo., 2 tabs. (NACA RM L53I11)

SOME EFFECTS OF AEROELASTICITY AND SWEEPBACK ON THE ROLLING EFFECTIVENESS AND DRAG OF A 1/11-SCALE MODEL OF THE BELL X-5 AIRPLANE WING AT MACH NUMBERS FROM 0.6 TO 1.5. Roland D. English. November 1953. 21p. diagrs., photos. (NACA RM L53I18b)

WIND-TUNNEL INVESTIGATION OF THE EFFECTS OF STEADY ROLLING ON THE AERODYNAMIC LOADING CHARACTERISTICS OF A 45° SWEPTBACK WING AT HIGH SUBSONIC SPEEDS. James W. Wiggins and Richard E. Kuhn. November 1953. 22p. diagrs., photos. (NACA RM L53J01a)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF THE EFFECT OF VARYING THE RATIO OF BODY DIAMETER TO WING SPAN FROM 0.1 TO 0.8 ON THE AERODYNAMIC CHARACTERISTICS IN PITCH OF A 45° SWEPTBACK-WING—BODY COMBINATION. Harold S. Johnson. November 1953. 32p. diagrs., photo., tab. (NACA RM L53J09a)

WIND-TUNNEL INVESTIGATION AT HIGH AND LOW SUBSONIC MACH NUMBERS OF TWO UNSWEPT WINGS HAVING NACA 2-006 AND NACA 65A006 AIRFOIL SECTIONS. Stanley F. Racisz. December 1953. 40p. diagrs., photo., tab. (NACA RM L53J29)

A STUDY OF THE PROBLEM OF DESIGNING AIRPLANES WITH SATISFACTORY INHERENT DAMPING OF THE DUTCH ROLL OSCILLATION. John P. Campbell and Marion O. McKinney, Jr. 1954. ii, 18p. diagrs., tabs. (NACA Rept. 1199. Supersedes TN 3035)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF THE EFFECTS OF CHORDWISE WING FENCES AND HORIZONTAL-TAIL POSITION ON THE STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF AN AIRPLANE MODEL WITH A 35° SWEPTBACK WING. M. J. Queijo, Byron M. Jaquet, and Walter D. Wolhart. 1954. ii, 29p. diagrs., photos., tab. (NACA Rept. 1203. Supersedes RM L50K07; RM L51H17)

A COMPARISON OF THE SPANWISE LOADING CALCULATED BY VARIOUS METHODS WITH EXPERIMENTAL LOADINGS OBTAINED ON A 45° SWEPTBACK WING OF ASPECT RATIO 8.02 AT A REYNOLDS NUMBER OF 4.0×10^6. William C. Schneider. 1954. ii, 11p. diagrs., tab. (NACA Rept. 1208. Supersedes RM L51G30)

STABILITY CHARACTERISTICS AT LOW SPEED OF A VARIABLE-SWEEP AIRPLANE MODEL HAVING A PARTIALLY CAMBERED WING WITH SEVERAL CHORD-EXTENSION CONFIGURATIONS. Robert E. Becht. February 1954. 37p. diagrs., photos. (NACA RM L53L14)

THE EFFECTS OF HORIZONTAL-TAIL HEIGHT AND A PARTIAL-SPAN LEADING-EDGE EXTENSION ON THE STATIC LONGITUDINAL STABILITY OF A WING-FUSELAGE-TAIL COMBINATION HAVING A SWEPTBACK WING. Angelo Bandettini and Ralph Selan. March 1954. 54p. diagrs., photos., 2 tabs. (NACA RM A53J07)

DISTRIBUTION OF LIFT AND PITCHING MOMENT BETWEEN WING AND FUSELAGE AND EFFECTS OF WING FLEXIBILITY AND DIVE BRAKE ON A 1.30-SCALE SEMISPAN MODEL OF THE BELL X-5 AIRPLANE AT TRANSONIC SPEEDS AS DETERMINED BY THE NACA WING-FLOW METHOD. Garland J. Morris and Norman S. Silsby. March 1954. 46p. diagrs., photos., tab. (NACA RM L54A11)

CHORDWISE PRESSURES AND SECTION FORCE AND MOMENT COEFFICIENTS AT HIGH SUBSONIC SPEEDS NEAR MIDSPAN OF A TAPERED 35° SWEPTBACK WING WITH A FLAP-TYPE CONTROL AND AN ATTACHED TAB. Alexander D. Hammond and Barbara M. Keffer. March 1954. 57p. diagrs., 35 tabs. (NACA RM L54A22)

HINGE-MOMENT, LIFT, AND PITCHING-MOMENT CHARACTERISTICS OF A FLAP-TYPE CONTROL SURFACE HAVING VARIOUS HINGE-LINE LOCATIONS ON A 4-PERCENT-THICK 60° DELTA WING. TRANSONIC-BUMP METHOD. Robert F. Thompson. March 1954. 73p. diagrs., photo. (NACA RM L54B08)

EFFECTS OF OPERATING PROPELLERS ON THE WING-SURFACE PRESSURES OF A FOUR-ENGINE TRACTOR AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK. Carl D. Kolbe and Frederick W. Boltz. April 1954. 133p. diagrs., photo., 19 tabs. (NACA RM A53L29)

EFFECTS OF SWEEP AND THICKNESS ON THE STATIC LONGITUDINAL AERODYNAMIC CHARACTERISTICS OF A SERIES OF THIN, LOW-ASPECT-RATIO, HIGHLY TAPERED WINGS AT TRANSONIC SPEEDS. TRANSONIC-BUMP METHOD. Albert G. Few, Jr., and Paul G. Fournier. April 1954. 107p. diagrs., photo., tab. (NACA RM L54B25)

EFFECT AT TRANSONIC SPEEDS OF INBOARD SPOILERS ON THE STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A 45° SWEPTBACK WING-BODY COMBINATION HAVING A LEADING-EDGE CHORD-EXTENSION. James H. Henderson. June 1954. 24p. diagrs., photo. (NACA RM L54D13)

STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A COMPOSITE-PLAN-FORM WING MODEL INCLUDING SOME COMPARISONS WITH A 45° SWEPTBACK WING AT TRANSONIC SPEEDS. Walter D. Wolhart. August 1954. 36p. diagrs., photo., tabs. (NACA RM L54F24)

EFFECT OF GROUND INTERFERENCE ON THE AERODYNAMIC AND FLOW CHARACTERISTICS OF A 42° SWEPTBACK WING AT REYNOLDS NUMBERS UP TO 6.8 x 10^6. G. Chester Furlong and Thomas V. Bollech. 1955. ii, 60p. diagrs., photos., tab. (NACA Rept. 1218. Combination of RM L8G22; TN 2487)

EFFECTS OF WING POSITION AND FUSELAGE SIZE ON THE LOW-SPEED STATIC AND ROLLING STABILITY CHARACTERISTICS OF A DELTA-WING MODEL. Alex Goodman and David F. Thomas, Jr. 1955. ii, 31p. diagrs., photos., tabs. (NACA Rept. 1224. Supersedes TN 3063)

AN INVESTIGATION OF THE MAXIMUM LIFT OF WINGS AT SUPERSONIC SPEEDS. James J. Gallagher and James N. Mueller. 1955. ii, 28p. diagrs., photos., tabs. (NACA Rept. 1227. Supersedes RM L7J10)

A FLIGHT EVALUATION OF THE LONGITUDINAL STABILITY CHARACTERISTICS ASSOCIATED WITH THE PITCH-UP OF A SWEPT-WING AIRPLANE IN MANEUVERING FLIGHT AT TRANSONIC SPEEDS. Seth B. Anderson and Richard S. Bray. 1955. ii, 12p. diagrs., photo., tab. (NACA Rept. 1237. Supersedes RM A51I12)

WING-LOAD MEASUREMENTS OF THE BELL X-5 RESEARCH AIRPLANE AT A SWEEP ANGLE OF 58.7°. Richard D. Banner, Robert D. Reed, and William L. Marcy. April 1955. 22p. diagrs., photo., tab. (NACA RM H55A11)

FLIGHT DETERMINATION OF THE LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 58.7° SWEEPBACK. Thomas W. Finch. May 1955. 30p. diagrs., photo., tab. (NACA RM H55C07)

FLIGHT TESTS OF LEADING-EDGE AREA SUCTION ON A FIGHTER-TYPE AIRPLANE WITH A 35° SWEPTBACK WING. Richard S. Bray and Robert C. Innis. June 1955. 30p. diagrs., photos., tab. (NACA RM A55C07)

EFFECTS OF SWEEP ON THE MAXIMUM-LIFT CHARACTERISTICS OF FOUR ASPECT-RATIO-4 WINGS AT TRANSONIC SPEEDS. Thomas R. Turner. July 1955. 25p. diagrs. (NACA TN 3468. Formerly RM L50H11)

SUMMARY OF RESULTS OF A WIND-TUNNEL INVESTIGATION OF NINE RELATED HORIZONTAL TAILS. Jules B. Dods, Jr. and Bruce E. Tinling. July 1955. 105p. diagrs., 2 tabs. (NACA TN 3497. Formerly RM A51G31a)

CORRECTION OF ADDITIONAL SPAN LOADINGS COMPUTED BY THE WEISSINGER SEVEN-POINT METHOD FOR MODERATELY TAPERED WINGS OF HIGH ASPECT RATIO. John DeYoung and Walter H. Barling, Jr. July 1955. 31p. diagrs. (NACA TN 3500)

EFFECTS OF SWEEP AND ANGLE OF ATTACK ON BOUNDARY-LAYER TRANSITION ON WINGS AT MACH NUMBER 4.04. Robert W. Dunning and Edward F. Ulmann. August 1955. 31p. diagrs., photos. (NACA TN 3473)

THE EFFECTIVENESS OF WING VORTEX GENERATORS IN IMPROVING THE MANEUVERING CHARACTERISTICS OF A SWEPT-WING AIRPLANE AT TRANSONIC SPEEDS. Norman M. McFadden, George A. Rathert, Jr., and Richard S. Bray. September 1955. 43p. diagrs., photos., tab. (NACA TN 3523. Supersedes RM A51J18)

CALCULATED SPANWISE LIFT DISTRIBUTIONS AND AERODYNAMIC INFLUENCE COEFFICIENTS FOR SWEPT WINGS IN SUBSONIC FLOW. Franklin W. Diederich and Martin Zlotnick. October 1955. 173p. diagrs., tabs. (NACA TN 3476)

SUMMARY OF RESULTS OBTAINED BY TRANSONIC-BUMP METHOD ON EFFECTS OF PLAN FORM AND THICKNESS ON LIFT AND DRAG CHARACTERISTICS OF WINGS AT TRANSONIC SPEEDS. Edward C. Polhamus. November 1955. 33p. diagrs., tab. (NACA TN 3469. Supersedes RM L51H30)

EXPERIMENTAL INVESTIGATION AT LOW SPEED OF EFFECTS OF FUSELAGE CROSS SECTION ON STATIC LONGITUDINAL AND LATERAL STABILITY CHARACTERISTICS OF MODELS HAVING 0° AND 45° SWEPTBACK SURFACES. William Letko and James L. Williams. December 1955. 45p. diagrs., tabs. (NACA TN 3551)

THEORETICAL SPAN LOAD DISTRIBUTIONS AND ROLLING MOMENTS FOR SIDESLIPPING WINGS OF ARBITRARY PLAN FORM IN INCOMPRESSIBLE FLOW. M. J. Queijo. December 1955. 45p. diagrs. (NACA TN 3605)

PRELIMINARY STUDY OF SOME FACTORS WHICH AFFECT THE STALL-FLUTTER CHARACTERISTICS OF THIN WINGS. A. Gerald Rainey. March 1956. 33p. diagrs., photo., tab. (NACA TN 3622. Supersedes RM L52D08)

AN ANALYSIS OF ESTIMATED AND EXPERIMENTAL TRANSONIC DOWNWASH CHARACTERISTICS AS AFFECTED BY PLAN FORM AND THICKNESS FOR WING AND WING-FUSELAGE CONFIGURATIONS. Joseph Weil, George S. Campbell and Margaret S. Diederich. April 1956. 92p. diagrs., photos., tabs. (NACA TN 3628. Supersedes RM L52I22)

THEORETICAL PRESSURE DISTRIBUTIONS FOR SOME SLENDER WING-BODY COMBINATIONS AT ZERO LIFT. Paul F. Byrd. April 1956. 39p. diagrs. (NACA TN 3674. Supersedes RM A54J07)

INVESTIGATION BY THE TRANSONIC-BUMP METHOD OF A 35° SWEPTBACK SEMISPAN MODEL EQUIPPED WITH A FLAP OPERATED BY A SERIES OF SERVOVANES LOCATED AHEAD OF AND GEARED TO THE FLAP. William H. Phillips and Robert F. Thompson. April 1956. 39p. diagrs., photo. (NACA TN 3689. Supersedes RM L51J10)

WIND-TUNNEL INVESTIGATION OF THE EFFECT OF CLIPPING THE TIPS OF TRIANGULAR WINGS OF DIFFERENT THICKNESS, CAMBER, AND ASPECT RATIO - TRANSONIC BUMP METHOD. Horace F. Emerson. June 1956. 183p. diagrs., photo., tabs. (NACA TN 3671. Supersedes RM A53L03)

FLIGHT TESTS AT SUPERSONIC SPEEDS TO DETERMINE THE EFFECT OF TAPER ON THE ZERO-LIFT DRAG OF SWEPTBACK LOW-ASPECT-RATIO WINGS. Murray Pittel. June 1956. 20p. diagrs., photos. (NACA TN 3697. Supersedes RM L50F30a)

PRELIMINARY WIND-TUNNEL TESTS OF TRIANGULAR AND RECTANGULAR WINGS IN STEADY ROLL AT MACH NUMBERS OF 1.62 AND 1.92. Clinton E. Brown and Harry S. Heinke, Jr. June 1956. 36p. diagrs., tabs. (NACA TN 3740. Supersedes RM L8L30)

(1.2.2.2.4) Taper and Twist

FREE-FLIGHT INVESTIGATION OF CONTROL EFFECTIVENESS OF FULL-SPAN, 0.2-CHORD PLAIN AILERONS AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS TO DETERMINE SOME EFFECTS OF WING SWEEPBACK, TAPER, ASPECT RATIO, AND SECTION-THICKNESS RATIO. Carl A. Sandahl. August 13, 1947. 16p. diagrs., photos., tab. (NACA RM L7F30)

FREE-FLIGHT INVESTIGATION OF THE ROLLING EFFECTIVENESS AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS OF LEADING-EDGE AND TRAILING-EDGE AILERONS IN CONJUNCTION WITH TAPERED AND UNTAPERED PLAN FORMS. H. Kurt Strass. July 23, 1948. 19p. diagrs., photos. (NACA RM L8E10)

CHARACTERISTICS THROUGHOUT THE SUBSONIC SPEED RANGE OF A PLANE WING AND OF A CAMBERED AND TWISTED WING, BOTH HAVING 45° OF SWEEPBACK. Ben H. Johnson, Jr., and Harry H. Shibata. July 1951. 122p. diagrs., photos. (NACA RM A51D27)

A PRELIMINARY WIND-TUNNEL INVESTIGATION OF FLUTTER CHARACTERISTICS OF DELTA WINGS. Robert W. Herr. April 1952. 35p. diagrs., tabs. (NACA RM L52B14a)

AN INVESTIGATION THROUGHOUT THE SUBSONIC SPEED RANGE OF A FULL-SPAN AND A SEMI-SPAN MODEL OF A PLANE WING AND OF A CAMBERED AND TWISTED WING, ALL HAVING 45° OF SWEEPBACK. Harry H. Shibata, Angelo Bandettini, and Joseph Cleary. June 1952. 65p. diagrs., photos. (NACA RM A52D01)

TRANSONIC FLIGHT TESTS TO DETERMINE THE EFFECT OF THICKNESS RATIO AND PLAN-FORM MODIFICATION ON THE ZERO-LIFT DRAG OF A 45° SWEPTBACK WING. William B. Pepper, Jr., and Sherwood Hoffman. August 1952. 24p. diagrs., photos., tabs. (NACA RM L52F02a)

THE LONGITUDINAL CHARACTERISTICS AT MACH NUMBERS UP TO 0.92 OF A CAMBERED AND TWISTED WING HAVING 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. George G. Edwards, Bruce E. Tinling, and Arthur C. Ackerman. September 1952. 71p. diagrs., photos., tab. (NACA RM A52F18)

EFFECTS OF TWIST AND CAMBER, FENCES, AND HORIZONTAL-TAIL HEIGHT ON THE LOW-SPEED LONGITUDINAL STABILITY CHARACTERISTICS OF A WING-FUSELAGE COMBINATION WITH A 45° SWEPTBACK WING OF ASPECT RATIO 8 AT A REYNOLDS NUMBER OF 4.0×10^6. Gerald V. Foster. December 1952. 30p. diagrs., photo. (NACA RM L52J03)

PRESSURE DISTRIBUTION AT MACH NUMBERS UP TO 0.90 ON A CAMBERED AND TWISTED WING HAVING 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10, INCLUDING THE EFFECTS OF FENCES. Frederick W. Boltz and Harry H. Shibata. March 1953. 133p. diagrs., photos., tabs. (NACA RM A52K20)

EXPERIMENTAL INVESTIGATION OF THE EFFECTS OF PLAN-FORM TAPER ON THE AERODYNAMIC CHARACTERISTICS OF SYMMETRICAL UNSWEPT WINGS OF VARYING ASPECT RATIO. Edwin C. Allen. May 1953. 53p. diagrs., photos., tab. (NACA RM A53C19)

LONGITUDINAL STABILITY AND WAKE-FLOW CHARACTERISTICS OF A TWISTED AND CAMBERED WING-FUSELAGE COMBINATION OF 45° SWEEPBACK AND ASPECT RATIO 8 WITH A HORIZONTAL TAIL AND STALL-CONTROL DEVICES AT A REYNOLDS NUMBER OF 4.0×10^6. Gerald V. Foster. June 1953. 51p. diagrs., photos., tab. (NACA RM L53D08)

WIND-TUNNEL INVESTIGATION OF THE AERODYNAMIC CHARACTERISTICS IN PITCH OF WING-FUSELAGE COMBINATIONS AT HIGH SUBSONIC SPEEDS. TAPER-RATIO SERIES. Thomas J. King, Jr. and Thomas B. Pasteur, Jr. June 1953. 37p. diagrs., photos., tab. (NACA RM L53E20)

DETERMINATION OF MEAN CAMBER SURFACES FOR WINGS HAVING UNIFORM CHORDWISE LOADING AND ARBITRARY SPANWISE LOADING IN SUBSONIC FLOW. S. Katzoff, M. Frances Faison and Hugh C. DuBose. 1954. ii, 17p. diagrs., tab. (NACA Rept. 1176. Formerly TN 2908)

THE TRANSONIC CHARACTERISTICS OF UNSWEPT WINGS HAVING ASPECT RATIOS OF 4, SPANWISE VARIATIONS IN THICKNESS RATIO, AND VARIATIONS IN PLAN-FORM TAPER - TRANSONIC-BUMP TECHNIQUE. Warren H. Nelson. March 1954. 29p. diagrs., photo. (NACA RM A53L17)

CALCULATED SPANWISE LIFT DISTRIBUTIONS, INFLUENCE FUNCTIONS, AND INFLUENCE COEFFICIENTS FOR UNSWEPT WINGS IN SUBSONIC FLOW. Franklin W. Diederich and Martin Zlotnick. 1955. ii, 69p. diagrs., tabs. (NACA Rept. 1228. Supersedes TN 3014)

CALCULATED SPANWISE LIFT DISTRIBUTIONS AND AERODYNAMIC INFLUENCE COEFFICIENTS FOR SWEPT WINGS IN SUBSONIC FLOW. Franklin W. Diederich and Martin Zlotnick. October 1955. 173p. diagrs., tabs. (NACA TN 3476)

THE TRANSONIC CHARACTERISTICS OF 36 SYMMETRICAL WINGS OF VARYING TAPER, ASPECT RATIO, AND THICKNESS AS DETERMINED BY THE TRANSONIC-BUMP TECHNIQUE. Warren H. Nelson, Edwin C. Allen, and Walter J. Krumm. December 1955. 131p. diagrs., photo. (NACA TN 3529. Supersedes RM A53I29)

THEORETICAL SPAN LOAD DISTRIBUTIONS AND ROLLING MOMENTS FOR SIDESLIPPING WINGS OF ARBITRARY PLAN FORM IN INCOMPRESSIBLE FLOW. M. J. Queijo. December 1955. 45p. diagrs. (NACA TN 3605)

WIND-TUNNEL INVESTIGATION OF THE EFFECT OF CLIPPING THE TIPS OF TRIANGULAR WINGS OF DIFFERENT THICKNESS, CAMBER, AND ASPECT RATIO - TRANSONIC BUMP METHOD. Horace F. Emerson. June 1956. 183p. diagrs., photo., tabs. (NACA TN 3671. Supersedes RM A53L03)

FLIGHT TESTS AT SUPERSONIC SPEEDS TO DETERMINE THE EFFECT OF TAPER ON THE ZERO-LIFT DRAG OF SWEPTBACK LOW-ASPECT-RATIO WINGS. Murray Pittel. June 1956. 20p. diagrs., photos. (NACA TN 3697. Supersedes RM L50F30a)

(1. 2. 2. 2. 5)
Inlets and Exits

INVESTIGATION OF THE EFFECTS OF WING AND TAIL MODIFICATIONS ON THE LOW-SPEED STABILITY CHARACTERISTICS OF A MODEL HAVING A THIN 40° SWEPT WING OF ASPECT RATIO 3.5. Joseph Weil, William C. Sleeman, Jr., and Andrew L. Byrnes, Jr. April 1953. 95p. diagrs., photos., tab. (NACA RM L53C09)

(1. 2. 2. 2. 6)
Surface Conditions

CHARACTERISTICS THROUGHOUT THE SUBSONIC SPEED RANGE OF A PLANE WING AND OF A CAMBERED AND TWISTED WING, BOTH HAVING 45° OF SWEEPBACK. Ben H. Johnson, Jr., and Harry H. Shibata. July 1951. 122p. diagrs., photos. (NACA RM A51D27)

TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. ANALYSIS OF PRESSURE DISTRIBUTION OF WING-FUSELAGE CONFIGURATION HAVING A WING OF 45° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Donald L. Loving and Bruce B. Estabrooks. September 1951. 132p. diagrs., photos. (NACA RM L51F07)

AN INVESTIGATION THROUGHOUT THE SUBSONIC SPEED RANGE OF A FULL-SPAN AND A SEMI-SPAN MODEL OF A PLANE WING AND OF A CAMBERED AND TWISTED WING, ALL HAVING 45° OF SWEEPBACK. Harry H. Shibata, Angelo Bandettini, and Joseph Cleary. June 1952. 65p. diagrs., photos. (NACA RM A52D01)

WIND-TUNNEL INVESTIGATION AT HIGH AND LOW SUBSONIC MACH NUMBERS OF TWO UNSWEPT WINGS HAVING NACA 2-006 AND NACA 65A006 AIRFOIL SECTIONS. Stanley F. Racisz. December 1953. 40p. diagrs., photo., tab. (NACA RM L53J29)

THE EFFECTIVENESS OF WING VORTEX GENERATORS IN IMPROVING THE MANEUVERING CHARACTERISTICS OF A SWEPT-WING AIRPLANE AT TRANSONIC SPEEDS. Norman M. McFadden, George A. Rathert, Jr., and Richard S. Bray. September 1955. 43p. diagrs., photos., tab. (NACA TN 3523. Supersedes RM A51J18)

(1. 2. 2. 2. 7)
Dihedral

A COMPARISON OF THE EXPERIMENTAL AND THEORETICAL LOADING OVER TRIANGULAR WINGS IN SIDESLIP AT SUPERSONIC SPEEDS. John W. Boyd. May 18, 1951. 58p. diagrs., photo., tabs. (NACA RM A51C13)

AN APPROXIMATION TO THE EFFECT OF GEOMETRIC DIHEDRAL ON THE ROLLING MOMENT DUE TO SIDESLIP FOR WINGS AT TRANSONIC AND SUPERSONIC SPEEDS. Paul E. Purser. April 1952. 10p. diagrs. (NACA RM L52B01)

WIND-TUNNEL INVESTIGATION OF THE EFFECTS OF GEOMETRIC DIHEDRAL ON THE AERODYNAMIC CHARACTERISTICS IN PITCH AND SIDESLIP OF AN UNSWEPT- AND A 45° SWEPTBACK-WING-FUSELAGE COMBINATION AT HIGH SUBSONIC SPEEDS. Richard E. Kuhn and John W. Draper. July 1953. 41p. diagrs., photos. (NACA RM L53F09)

A STUDY OF THE PROBLEM OF DESIGNING AIRPLANES WITH SATISFACTORY INHERENT DAMPING OF THE DUTCH ROLL OSCILLATION. John P. Campbell and Marion O. McKinney, Jr. 1954. ii, 18p. diagrs., tabs. (NACA Rept. 1199. Supersedes TN 3035)

LOW-SPEED STATIC LATERAL AND ROLLING STABILITY CHARACTERISTICS OF A SERIES OF CONFIGURATIONS COMPOSED OF INTERSECTING TRIANGULAR PLAN-FORM SURFACES. David F. Thomas, Jr. October 1955. 29p. diagrs., photos. (NACA TN 3532)

(1. 2. 2. 3) HIGH-LIFT DEVICES

FREE-FLIGHT INVESTIGATION OF THE ROLLING EFFECTIVENESS AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS OF LEADING-EDGE AND TRAILING-EDGE AILERONS IN CONJUNCTION WITH TAPERED AND UNTAPERED PLAN FORMS. H. Kurt Strass. July 23, 1948. 19p. diagrs., photos. (NACA RM L8E10)

EFFECTS OF HORIZONTAL-TAIL HEIGHT AND A WING LEADING-EDGE MODIFICATION CONSISTING OF A FULL-SPAN FLAP AND A PARTIAL-SPAN CHORD-EXTENSION ON THE AERODYNAMIC CHARACTERISTICS IN PITCH AT HIGH SUBSONIC SPEEDS OF A MODEL WITH A 45° SWEPTBACK WING. William D. Morrison, Jr. and William J. Alford, Jr. June 1953. 37p. diagrs., photo., tab. (NACA RM L53E06)

EFFECTS OF HIGH-LIFT DEVICES AND HORIZONTAL-TAIL LOCATION ON THE LOW-SPEED CHARACTERISTICS OF A LARGE-SCALE 45° SWEPT-WING AIRPLANE CONFIGURATION. Ralph L. Maki and Ursel R. Embry. August 1954. 46p. diagrs., photo., tabs. (NACA RM A54E10)

A LIMITED FLIGHT INVESTIGATION OF THE EFFECT OF THREE VORTEX-GENERATOR CONFIGURATIONS ON THE EFFECTIVENESS OF A PLAIN FLAP ON AN UNSWEPT WING. Garland J. Morris and Lindsay J(ohn) Lina. September 1955. 20p. diagrs., photos., tabs. (NACA TN 3536)

INVESTIGATION OF THE EFFECTS OF GROUND PROXIMITY AND PROPELLER POSITION ON THE EFFECTIVENESS OF A WING WITH LARGE-CHORD SLOTTED FLAPS IN REDIRECTING PROPELLER SLIPSTREAMS DOWNWARD FOR VERTICAL TAKE-OFF. Richard E. Kuhn. March 1956. 38p. diagrs., photos., tab. (NACA TN 3629)

INVESTIGATION AT ZERO FORWARD SPEED OF A LEADING-EDGE SLAT AS A LONGITUDINAL CONTROL DEVICE FOR VERTICALLY RISING AIRPLANES THAT UTILIZE THE REDIRECTED-SLIPSTREAM PRINCIPLE. Richard E. Kuhn. May 1956. 33p. diagrs., photos. (NACA TN 3692)

PRELIMINARY INVESTIGATION OF THE EFFECTIVENESS OF A SLIDING FLAP IN DEFLECTING A PROPELLER SLIPSTREAM DOWNWARD FOR VERTICAL TAKE-OFF. Richard E. Kuhn and Kenneth P. Spreemann. May 1956. 25p. diagrs., photo. (NACA TN 3693)

(1. 2. 2. 3. 1) Trailing-Edge Flaps

LONGITUDINAL STABILITY CHARACTERISTICS OF A 42° SWEPTBACK WING AND TAIL COMBINATION AT A REYNOLDS NUMBER OF 6.8×10^6. Stanley H. Spooner and Albert P. Martina. July 22, 1948. 44p. diagrs., photos., 2 tabs. (NACA RM L8E12)

LONGITUDINAL-STABILITY INVESTIGATION OF HIGH-LIFT AND STALL-CONTROL DEVICES ON A 52° SWEPTBACK WING WITH AND WITHOUT FUSELAGE AND HORIZONTAL TAIL AT A REYNOLDS NUMBER OF 6.8×10^6. Gerald V. Foster and James E. Fitzpatrick. December 20, 1948. 41p. diagrs., photos., tabs. (NACA RM L8I08)

HINGE-MOMENT MEASUREMENTS OF A WING WITH LEADING-EDGE AND TRAILING-EDGE FLAPS AT A MACH NUMBER OF 1. 93. William B. Boatright and Robert W. Rainey. January 14, 1949. 12p. diagrs., tab. (NACA RM L8K12a)

INVESTIGATION AT A MACH NUMBER OF 1.9 AND A REYNOLDS NUMBER OF 2.2×10^6 OF SEVERAL FLAP-TYPE LATERAL-CONTROL DEVICES ON A WING HAVING 42.7° SWEEPBACK OF THE LEADING EDGE. Kennith L. Goin. March 11, 1949. 28p. diagrs., photos., tabs. (NACA RM L9A18a)

EFFECTS OF HIGH-LIFT AND STALL-CONTROL DEVICES, FUSELAGE, AND HORIZONTAL TAIL ON A WING SWEPT BACK 42° AT THE LEADING EDGE AND HAVING SYMMETRICAL CIRCULAR-ARC AIRFOIL SECTIONS AT A REYNOLDS NUMBER OF 6.9×10^6. Robert L. Woods and Stanley H. Spooner. April 20, 1949. 42p. diagrs., photos., tabs. (NACA RM L9B11)

A STUDY OF SEVERAL FACTORS AFFECTING THE STABILITY CONTRIBUTED BY A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS ON A SWEPTBACK-WING AIRPLANE MODEL. Gerald V. Foster and Roland F. Griner. October 28, 1949. 28p. diagrs., tab. (NACA RM L9H19)

EFFECTS OF VARYING THE SIZE AND LOCATION OF TRAILING-EDGE FLAP-TYPE CONTROLS ON THE AERODYNAMIC CHARACTERISTICS OF AN UNSWEPT WING AT A MACH NUMBER OF 1.9. Meade H. Mitchell, Jr. August 16, 1950. 33p. diagrs., photo., tab. (NACA RM L50F08)

LOW-SPEED LONGITUDINAL AND WAKE AIR-FLOW CHARACTERISTICS AT A REYNOLDS NUMBER OF 6.0 x 10^6 OF A 52° SWEPTBACK WING EQUIPPED WITH VARIOUS SPANS OF LEADING-EDGE AND TRAILING-EDGE FLAPS, A FUSELAGE, AND A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS. Roland F. Griner and Gerald V. Foster. February 28, 1951. 66p. diagrs., photo., 3 tabs. (NACA RM L50K29)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 2 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL-LONGITUDINAL CHARACTERISTICS. David Graham and David G. Koenig. April 23, 1951. 35p. diagrs., photo., 3 tabs. (NACA RM A51B21)

LOW-SPEED LONGITUDINAL AND WAKE AIR-FLOW CHARACTERISTICS AT A REYNOLDS NUMBER OF 5.5 x 10^6 OF A CIRCULAR-ARC 52° SWEPTBACK WING WITH A FUSELAGE AND A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS. Gerald V. Foster and Roland F. Griner. June 19, 1951. 44p. diagrs., tabs. (NACA RM L51C30)

EFFECT OF VERTICAL LOCATION OF A HORIZONTAL TAIL ON THE STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A 45° SWEPTBACK-WING - FUSELAGE COMBINATION OF ASPECT RATIO 8 AT A REYNOLDS NUMBER OF 4.0 x 10^6. Reino J. Salmi and William A. Jacques. January 1952. 42p. diagrs., photos. (NACA RM L51J08)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 2 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LATERAL CHARACTERISTICS. David Graham and David G. Koenig. February 1952. 38p. diagrs., 2 tabs. (NACA RM A51L03)

LOW-SPEED LATERAL-CONTROL CHARACTERISTICS OF AN UNSWEPT WING WITH HEXAGONAL AIRFOIL SECTIONS AND ASPECT RATIO 2.5 EQUIPPED WITH SPOILERS AND WITH SHARP- AND THICKENED-TRAILING-EDGE FLAP-TYPE AILERONS AT A REYNOLDS NUMBER OF 7.6 x 10^6. James E. Fitzpatrick and Robert L. Woods. April 1952. 58p. photos., diagrs., tab. (NACA RM L52B15)

INVESTIGATION OF THE LOW-SPEED AERODYNAMIC CHARACTERISTICS OF A VARIABLE-SWEEP AIRPLANE MODEL WITH A WING HAVING PARTIAL-SPAN CAMBERED-LEADING-EDGE MODIFICATIONS. Robert E. Becht and Andrew L. Byrnes, Jr. September 1952. 47p. diagrs., photos. (NACA RM L52G08a)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE MODEL WITH AN ASPECT RATIO 4 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - HIGH-LIFT DEVICES AND LATERAL CONTROLS. Ralph W. Franks. February 1953. 45p. diagrs., photo., 2 tabs. (NACA RM A52K13)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF TWO AIRPLANE MODELS HAVING ASPECT RATIO 2 TRAPEZOIDAL WINGS OF TAPER RATIOS 0.33 AND 0.20. Ralph W. Franks. February 1953. 56p. diagrs., photos., 3 tabs. (NACA RM A52L16)

THE EFFECTS OF FUSELAGE SIZE ON THE LOW-SPEED LONGITUDINAL AERODYNAMIC CHARACTERISTICS OF A THIN 60° DELTA WING WITH AND WITHOUT A DOUBLE SLOTTED FLAP. John M. Riebe. February 1953. 24p. diagrs., photo., tab. (NACA RM L52L29a)

LOW-SPEED LONGITUDINAL CHARACTERISTICS OF AN UNSWEPT HEXAGONAL WING WITH AND WITHOUT A FUSELAGE AND A HORIZONTAL TAIL LOCATED AT VARIOUS POSITIONS AT REYNOLDS NUMBERS FROM 2.8 x 10^6 TO 7.6 x 10^6. Gerald V. Foster, Ernst F. Mollenberg, and Robert L. Woods. February 26, 1953. 63p. diagrs., photos., 3 tabs. (NACA RM L52L11b)

WIND-TUNNEL INVESTIGATION OF STALL CONTROL BY SUCTION THROUGH A POROUS LEADING EDGE ON A 37° SWEPTBACK WING OF ASPECT RATIO 6 AT REYNOLDS NUMBERS FROM 2.50 x 10^6 to 8.10 x 10^6. Robert R. Graham and William A. Jacques. March 1953. 67p. diagrs., photo., 2 tabs. (NACA RM L52L05)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 3 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LONGITUDINAL AND LATERAL CHARACTERISTICS. David G. Koenig. April 1953. 61p. diagrs., photos., 4 tabs. (NACA RM A52L15)

THE EFFECTS OF NACELLES AND OF EXTENDED SPLIT FLAPS ON THE LONGITUDINAL CHARACTERISTICS OF A WING-FUSELAGE-TAIL COMBINATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. Bruce E. Tinling and Armando E. Lopez. June 1953. 47p. diagrs., tab. (NACA RM A53D06)

THE LOW-SPEED LIFT AND DRAG CHARACTERISTICS OF A SERIES OF AIRPLANE MODELS HAVING TRIANGULAR OR MODIFIED TRIANGULAR WINGS. David Graham. June 1953. 49p. diagrs., photo., tabs. (NACA RM A53D14)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH A VARIABLE-INCIDENCE TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL. David G. Koenig. June 1953. 42p. diagrs., photo., tabs. (NACA RM A53D21)

LONGITUDINAL STABILITY AND WAKE-FLOW CHARACTERISTICS OF A TWISTED AND CAMBERED WING-FUSELAGE COMBINATION OF 45° SWEEPBACK AND ASPECT RATIO 8 WITH A HORIZONTAL TAIL AND STALL-CONTROL DEVICES AT A REYNOLDS NUMBER OF 4.0 x 10^6. Gerald V. Foster. June 1953. 51p. diagrs., photos., tab. (NACA RM L53D08)

THE LATERAL CONTROL CHARACTERISTICS OF CONSTANT-PERCENT-CHORD TRAILING-EDGE ELEVONS ON A POINTED WING OF ASPECT RATIO 2 AT MACH NUMBERS UP TO 0.95. Verlin D. Reed and Donald W. Smith. August 1953. 105p. diagrs., photo., tabs. (NACA RM A53F03)

THE RESULTS OF WIND-TUNNEL TESTS AT LOW SPEEDS OF A FOUR-ENGINE PROPELLER-DRIVEN AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. George G. Edwards, Donald A. Buell, and Jerald K. Dickson. December 1953. 121p. diagrs., photo., tabs. (NACA RM A53I28)

WIND-TUNNEL INVESTIGATION AT HIGH AND LOW SUBSONIC MACH NUMBERS OF TWO UNSWEPT WINGS HAVING NACA 2-006 AND NACA 65A006 AIRFOIL SECTIONS. Stanley F. Racisz. December 1953. 40p. diagrs., photo., tab. (NACA RM L53J29)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF THE EFFECTS OF CHORDWISE WING FENCES AND HORIZONTAL-TAIL POSITION ON THE STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF AN AIRPLANE MODEL WITH A 35° SWEPTBACK WING. M. J. Queijo, Byron M. Jaquet, and Walter D. Wolhart. 1954. ii, 29p. diagrs., photos., tab. (NACA Rept. 1203. Supersedes RM L50K07; RM L51H17)

STABILITY CHARACTERISTICS AT LOW SPEED OF A VARIABLE-SWEEP AIRPLANE MODEL HAVING A PARTIALLY CAMBERED WING WITH SEVERAL CHORD-EXTENSION CONFIGURATIONS. Robert E. Becht. February 1954. 37p. diagrs., photos. (NACA RM L53L14)

HINGE-MOMENT, LIFT, AND PITCHING-MOMENT CHARACTERISTICS OF A FLAP-TYPE CONTROL SURFACE HAVING VARIOUS HINGE-LINE LOCATIONS ON A 4-PERCENT-THICK 60° DELTA WING. TRANSONIC-BUMP METHOD. Robert F. Thompson. March 1954. 73p. diagrs., photo. (NACA RM L54B08)

EFFECTS OF OPERATING PROPELLERS ON THE WING-SURFACE PRESSURES OF A FOUR-ENGINE TRACTOR AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK. Carl D. Kolbe and Frederick W. Boltz. April 1954. 133p. diagrs., photo., 19 tabs. (NACA RM A53L29)

EFFECTS OF HIGH-LIFT DEVICES AND HORIZONTAL-TAIL LOCATION ON THE LOW-SPEED CHARACTERISTICS OF A LARGE-SCALE 45° SWEPT-WING AIRPLANE CONFIGURATION. Ralph L. Maki and Ursel R. Embry. August 1954. 46p. diagrs., photo., tabs. (NACA RM A54E10)

STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A COMPOSITE-PLAN-FORM WING MODEL INCLUDING SOME COMPARISONS WITH A 45° SWEPTBACK WING AT TRANSONIC SPEEDS. Walter D. Wolhart. August 1954. 36p. diagrs., photo., tabs. (NACA RM L54F24)

ANALYSIS OF WIND-TUNNEL TESTS AT LOW SPEEDS OF A FOUR-ENGINE PROPELLER-DRIVEN AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK. George G. Edwards and Donald A. Buell. October 1954. 137p. diagrs., photos., 2 tabs. (NACA RM A54F14)

EFFECT OF GROUND INTERFERENCE ON THE AERODYNAMIC AND FLOW CHARACTERISTICS OF A 42° SWEPTBACK WING AT REYNOLDS NUMBERS UP TO 6.8 x 10^6. G. Chester Furlong and Thomas V. Bollech. 1955. ii, 60p. diagrs., photos., tab. (NACA Rept. 1218. Combination of RM L8G22; TN 2487)

THEORETICAL ANALYSES TO DETERMINE UNBALANCED TRAILING-EDGE CONTROLS HAVING MINIMUM HINGE MOMENTS DUE TO DEFLECTION AT SUPERSONIC SPEEDS. Kennith L. Goin. August 1955. 52p. diagrs., tab. (NACA TN 3471. Formerly RM L51F19)

A LIMITED FLIGHT INVESTIGATION OF THE EFFECT OF THREE VORTEX-GENERATOR CONFIGURATIONS ON THE EFFECTIVENESS OF A PLAIN FLAP ON AN UNSWEPT WING. Garland J. Morris and Lindsay J(ohn) Lina. September 1955. 20p. diagrs., photos., tabs. (NACA TN 3536)

THEORETICAL ANALYSIS OF LINKED LEADING-EDGE AND TRAILING-EDGE FLAP-TYPE CONTROLS AT SUPERSONIC SPEEDS. E. Carson Yates, Jr. March 1956. 40p. diagrs., tab. (NACA TN 3617)

A WIND-TUNNEL INVESTIGATION OF A 0.4-SCALE MODEL OF AN ASSAULT-TRANSPORT AIRPLANE WITH BOUNDARY-LAYER CONTROL APPLIED. Marvin P. Fink, Bennie W. Cocke, and Stanley Lipson. May 1956. 63p. diagrs., photos. (NACA RM L55G26a)

(1. 2. 2. 3. 2)
Slots and Slats

HIGH-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A FIGHTER AIRPLANE MODEL WITH A SWEPT-BACK WING AND TAIL. Charles P. Morrill, Jr., and Lee E. Boddy. April 14, 1948. 47p. diagrs., photos. (NACA RM A7K28)

LONGITUDINAL STABILITY CHARACTERISTICS OF A 42° SWEPTBACK WING AND TAIL COMBINATION AT A REYNOLDS NUMBER OF 6.8 x 10^6. Stanley H. Spooner and Albert P. Martina. July 22, 1948 44p. diagrs., photos., 2 tabs. (NACA RM L8E12)

INVESTIGATION OF THE EFFECTS OF WING AND TAIL MODIFICATIONS ON THE LOW-SPEED STABILITY CHARACTERISTICS OF A MODEL HAVING A THIN 40° SWEPT WING OF ASPECT RATIO 3.5. Joseph Weil, William C. Sleeman, Jr., and Andrew L. Byrnes, Jr. April 1953. 95p. diagrs., photos., tab. (NACA RM L53C09)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF THE EFFECTS OF CHORDWISE WING FENCES AND HORIZONTAL-TAIL POSITION ON THE STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF AN AIRPLANE MODEL WITH A 35° SWEPTBACK WING. M. J. Queijo, Byron M. Jaquet, and Walter D. Wolhart. 1954. ii, 29p. diagrs., photos., tab. (NACA Rept. 1203. Supersedes RM L50K07; RM L51H17)

EFFECTS OF HIGH-LIFT DEVICES AND HORIZONTAL-TAIL LOCATION ON THE LOW-SPEED CHARACTERISTICS OF A LARGE-SCALE 45° SWEPT-WING AIRPLANE CONFIGURATION. Ralph L. Maki and Ursel R. Embry. August 1954. 46p. diagrs., photo., tabs. (NACA RM A54E10)

STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A COMPOSITE-PLAN-FORM WING MODEL INCLUDING SOME COMPARISONS WITH A 45° SWEPTBACK WING AT TRANSONIC SPEEDS. Walter D. Wolhart. August 1954. 36p. diagrs., photo., tabs. (NACA RM L54F24)

(1. 2. 2. 3. 3) Leading-Edge Flaps

A STUDY OF SEVERAL FACTORS AFFECTING THE STABILITY CONTRIBUTED BY A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS ON A SWEPTBACK-WING AIRPLANE MODEL. Gerald V. Foster and Roland F. Griner. October 28, 1949. 28p. diagrs., tab. (NACA RM L9H19)

LOW-SPEED LONGITUDINAL AND WAKE AIR-FLOW CHARACTERISTICS AT A REYNOLDS NUMBER OF 6.0 x 10^6 OF A 52° SWEPTBACK WING EQUIPPED WITH VARIOUS SPANS OF LEADING-EDGE AND TRAILING-EDGE FLAPS, A FUSELAGE, AND A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS. Roland F. Griner and Gerald V. Foster. February 28, 1951. 66p. diagrs., photo., 3 tabs. (NACA RM L50K29)

LOW-SPEED LONGITUDINAL AND WAKE AIR-FLOW CHARACTERISTICS AT A REYNOLDS NUMBER OF 5.5 x 10^6 OF A CIRCULAR-ARC 52° SWEPTBACK WING WITH A FUSELAGE AND A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS. Gerald V. Foster and Roland F. Griner. June 19, 1951. 44p. diagrs., tabs. (NACA RM L51C30)

EFFECT OF VERTICAL LOCATION OF A HORIZONTAL TAIL ON THE STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A 45° SWEPTBACK-WING - FUSELAGE COMBINATION OF ASPECT RATIO 8 AT A REYNOLDS NUMBER OF 4.0 x 10^6. Reino J. Salmi and William A. Jacques. January 1952. 42p. diagrs., photos. (NACA RM L51J08)

LOW-SPEED LONGITUDINAL CHARACTERISTICS OF AN UNSWEPT HEXAGONAL WING WITH AND WITHOUT A FUSELAGE AND A HORIZONTAL TAIL LOCATED AT VARIOUS POSITIONS AT REYNOLDS NUMBERS FROM 2.8 x 10^6 TO 7.6 x 10^6. Gerald V. Foster, Ernst F. Mollenberg, and Robert L. Woods. February 26, 1953. 63p. diagrs., photos., 3 tabs. (NACA RM L52L11b)

LOW-SPEED AILERON EFFECTIVENESS AS DETERMINED BY FORCE TESTS AND VISUAL-FLOW OBSERVATIONS ON A 52° SWEPTBACK WING WITH AND WITHOUT CHORD-EXTENSIONS. Patrick A. Cancro. April 1953. 38p. diagrs., photos. (NACA RM L53B26)

INVESTIGATION OF THE EFFECTS OF WING AND TAIL MODIFICATIONS ON THE LOW-SPEED STABILITY CHARACTERISTICS OF A MODEL HAVING A THIN 40° SWEPT WING OF ASPECT RATIO 3.5. Joseph Weil, William C. Sleeman, Jr., and Andrew L. Byrnes, Jr. April 1953. 95p. diagrs., photos., tab. (NACA RM L53C09)

LONGITUDINAL STABILITY AND WAKE-FLOW CHARACTERISTICS OF A TWISTED AND CAMBERED WING-FUSELAGE COMBINATION OF 45° SWEEPBACK AND ASPECT RATIO 8 WITH A HORIZONTAL TAIL AND STALL-CONTROL DEVICES AT A REYNOLDS NUMBER OF 4.0 x 10^6. Gerald V. Foster. June 1953. 51p. diagrs., photos., tab. (NACA RM L53D08)

FREE-FLIGHT-TUNNEL INVESTIGATION OF THE LOW-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A CANARD AIRPLANE MODEL. Joseph L. Johnson, Jr., and John W. Paulson. October 1953. 37p. diagrs., photo., 2 tabs. (NACA RM L53I11)

EFFECT OF GROUND INTERFERENCE ON THE AERODYNAMIC AND FLOW CHARACTERISTICS OF A 42° SWEPTBACK WING AT REYNOLDS NUMBERS UP TO 6.8 x 10^6. G. Chester Furlong and Thomas V. Bollech. 1955. ii, 60p. diagrs., photos., tab. (NACA Rept. 1218. Combination of RM L8G22; TN 2487)

(1. 2. 2. 4) CONTROLS

FREE-FLIGHT INVESTIGATION OF THE ROLLING EFFECTIVENESS OF SEVERAL DELTA WING - AILERON CONFIGURATIONS AT TRANSONIC AND SUPERSONIC SPEEDS. Carl A. Sandahl. August 27, 1948. 19p. diagrs., photos., tab. (NACA RM L8D16)

LOW-SPEED INVESTIGATION OF THE AERODYNAMIC, CONTROL, AND HINGE-MOMENT CHARACTERISTICS OF TWO TYPES OF CONTROLS ON A DELTA-WING-FUSELAGE MODEL WITH AND WITHOUT NACELLES. William I. Scallion. May 1953. 47p. diagrs., photos., tabs. (NACA RM L53C18)

(1. 2. 2. 4. 1) Flap Type

FREE-FLIGHT INVESTIGATION OF CONTROL EFFECTIVENESS OF FULL-SPAN, 0.2-CHORD PLAIN AILERONS AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS TO DETERMINE SOME EFFECTS OF WING SWEEPBACK, TAPER, ASPECT RATIO, AND SECTION-THICKNESS RATIO. Carl A. Sandahl. August 13, 1947. 16p. diagrs., photos., tab. (NACA RM L7F30)

LOW-SPEED WIND-TUNNEL TESTS OF A PILOTLESS AIRCRAFT HAVING HORIZONTAL AND VERTICAL WINGS AND CRUCIFORM TAIL. N. Mastrocola and A. Assadourian. August 19, 1947. 100p. diagrs., photos., tab. (NACA RM L6J18a)

ADDITIONAL RESULTS IN A FREE-FLIGHT INVESTIGATION OF CONTROL EFFECTIVENESS OF FULL-SPAN, 0.2-CHORD PLAIN AILERONS AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS TO DETERMINE SOME EFFECTS OF WING SWEEPBACK, ASPECT RATIO, TAPER, AND SECTION THICKNESS RATIO. Carl A. Sandahl and H. Kurt Strass. April 23, 1948. 31p. diagrs., photos. (NACA RM L7L01)

EFFECTS OF SWEEP ON CONTROLS. John G. Lowry, John A. Axelson, and Harold I. Johnson. June 3, 1948. 29p. diagrs. (NACA RM L8A28c)

FREE-FLIGHT INVESTIGATION OF THE ROLLING EFFECTIVENESS AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS OF LEADING-EDGE AND TRAILING-EDGE AILERONS IN CONJUNCTION WITH TAPERED AND UNTAPERED PLAN FORMS. H. Kurt Strass. July 23, 1948. 19p. diagrs., photos. (NACA RM L8E10)

FREE-FLIGHT INVESTIGATION AT TRANSONIC AND SUPERSONIC SPEEDS OF THE ROLLING EFFECTIVENESS OF A THIN, UNSWEPT WING HAVING PARTIAL-SPAN AILERONS. Carl A. Sandahl. October 22, 1948. 13p. diagrs., photos., tab. (NACA RM L8G20a)

INVESTIGATION OF A THIN WING OF ASPECT RATIO 4 IN THE AMES 12-FOOT PRESSURE WIND TUNNEL. III - THE EFFECTIVENESS OF A CONSTANT-CHORD AILERON. Ben H. Johnson, Jr., and Fred A. Demele. November 19, 1948. 26p. diagrs., photo. (NACA RM A8I17)

CONTROL EFFECTIVENESS AND HINGE-MOMENT MEASUREMENTS AT A MACH NUMBER OF 1.9 OF A NOSE FLAP AND TRAILING-EDGE FLAP ON A HIGHLY TAPERED LOW-ASPECT-RATIO WING. D. William Conner and Meade H. Mitchell, Jr. January 10, 1949. 26p. diagrs., photo. (NACA RM L8K17a)

FREE-FLIGHT INVESTIGATION AT TRANSONIC AND SUPERSONIC SPEEDS OF THE ROLLING EFFECTIVENESS OF SEVERAL AILERON CONFIGURATIONS ON A TAPERED WING HAVING 42.7° SWEEPBACK. Carl A. Sandahl. January 11, 1949. 23p. diagrs., photos., tab. (NACA RM L8K23)

HINGE-MOMENT MEASUREMENTS OF A WING WITH LEADING-EDGE AND TRAILING-EDGE FLAPS AT A MACH NUMBER OF 1.93. William B. Boatright and Robert W. Rainey. January 14, 1949. 12p. diagrs., tab. (NACA RM L8K12a)

EXPERIMENTAL AND CALCULATED HINGE MOMENTS OF TWO AILERONS ON A 42.7° SWEPTBACK WING AT A MACH NUMBER OF 1.9. James C. Sivells and Kennith L. Goin. January 19, 1949. 23p. diagrs., photos., tabs. (NACA RM L8K24a)

INVESTIGATION AT A MACH NUMBER OF 1.9 AND A REYNOLDS NUMBER OF 2.2×10^6 OF SEVERAL FLAP-TYPE LATERAL-CONTROL DEVICES ON A WING HAVING 42.7° SWEEPBACK OF THE LEADING EDGE. Kennith L. Goin. March 11, 1949. 28p. diagrs., photos., tabs. (NACA RM L9A18a)

WIND-TUNNEL INVESTIGATION OF A TAILLESS TRIANGULAR-WING FIGHTER AIRCRAFT AT MACH NUMBERS FROM 0.5 TO 1.5. Leslie F. Lawrence and James L. Summers. June 24, 1949. 56p. diagrs., photos., tab. (NACA RM A9B16)

EFFECTS OF SOME AIRFOIL-SECTION VARIATIONS ON WING-AILERON ROLLING EFFECTIVENESS AND DRAG AS DETERMINED IN FREE FLIGHT AT TRANSONIC AND SUPERSONIC SPEEDS. Carl A. Sandahl, William M. Bland, Jr., and H. Kurt Strass. July 22, 1949. 29p. diagrs., photos., tabs. (NACA RM L9D12)

THE EFFECT OF SPANWISE AILERON LOCATION ON THE ROLLING EFFECTIVENESS OF WINGS WITH 0° AND 45° SWEEP AT SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS. H. Kurt Strass. April 25, 1950. 28p. diagrs., photo. (NACA RM L50A27)

FREE-FLIGHT INVESTIGATION AT TRANSONIC AND SUPERSONIC SPEEDS OF THE ROLLING EFFECTIVENESS OF A PARTIAL-SPAN AILERON ON AN INVERSELY TAPERED SWEPTBACK WING. H. Kurt Strass, E. M. Fields, and E. D. Schult. May 1, 1950. 17p. diagrs., photo., tabs. (NACA RM L50B08)

THE TRANSONIC CHARACTERISTICS OF A LOW-ASPECT-RATIO TRIANGULAR WING WITH A CONSTANT-CHORD FLAP AS DETERMINED BY WING-FLOW TESTS, INCLUDING CORRELATION WITH LARGE-SCALE TESTS. George A. Rathert, Jr., L. Stewart Rolls, and Carl M. Hanson. July 18, 1950. 39p. diagrs., photo. (NACA RM A50E10)

EFFECTS OF VARYING THE SIZE AND LOCATION OF TRAILING-EDGE FLAP-TYPE CONTROLS ON THE AERODYNAMIC CHARACTERISTICS OF AN UNSWEPT WING AT A MACH NUMBER OF 1.9. Meade H. Mitchell, Jr. August 16, 1950. 33p. diagrs., photo., tab. (NACA RM L50F08)

EXPERIMENTAL DETERMINATION OF EFFECT OF STRUCTURAL RIGIDITY ON ROLLING EFFECTIVENESS OF SOME STRAIGHT AND SWEPT WINGS AT MACH NUMBERS FROM 0.7 TO 1.7. H. Kurt Strass, E. M. Fields, and Paul E. Purser. October 4, 1950. 40p. diagrs., photo., tab. (NACA RM L50G14b)

WIND-TUNNEL INVESTIGATION AT SUBSONIC AND LOW TRANSONIC SPEEDS OF THE EFFECTS OF AILERON SPAN AND SPANWISE LOCATION ON THE ROLLING CHARACTERISTICS OF A TEST VEHICLE WITH THREE UNTAPERED 45° SWEPTBACK WINGS. Harold S. Johnson. April 6, 1951. 26p. diagrs., photo., tab. (NACA RM L51B16)

COMPARISONS OF THE EFFECTIVENESS AND HINGE MOMENTS OF ALL-MOVABLE DELTA AND FLAP-TYPE CONTROLS ON VARIOUS WINGS. David G. Stone. April 19, 1951. 13p. diagrs. (NACA RM L51C22)

SOME EFFECTS OF SPANWISE AILERON LOCATION AND WING STRUCTURAL RIGIDITY ON THE ROLLING EFFECTIVENESS OF 0.3-CHORD FLAP-TYPE AILERONS ON A TAPERED WING HAVING 63° SWEEPBACK AT THE LEADING EDGE AND NACA 64A005 AIRFOIL SECTIONS. H. Kurt Strass, E. M. Fields, and Eugene D. Schult. June 1951. 25p. diagrs., photo., tab. (NACA RM L51D18a)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 2 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LATERAL CHARACTERISTICS. David Graham and David G. Koenig. February 1952. 38p. diagrs., 2 tabs. (NACA RM A51L03)

LOW-SPEED LATERAL-CONTROL CHARACTERISTICS OF AN UNSWEPT WING WITH HEXAGONAL AIRFOIL SECTIONS AND ASPECT RATIO 2.5 EQUIPPED WITH SPOILERS AND WITH SHARP- AND THICKENED-TRAILING-EDGE FLAP-TYPE AILERONS AT A REYNOLDS NUMBER OF 7.6×10^6. James E. Fitzpatrick and Robert L. Woods. April 1952. 58p. photos., diagrs., tab. (NACA RM L52B15)

FREE-FLIGHT INVESTIGATION AT ZERO LIFT IN THE MACH NUMBER RANGE BETWEEN 0.7 AND 1.4 TO DETERMINE THE EFFECTIVENESS OF AN INSET TAB AS A MEANS OF AERODYNAMICALLY RELIEVING AILERON HINGE MOMENTS. William M. Bland, Jr., and Edward T. Marley. January 1953. 19p. diagrs., photos. (NACA RM L52K07)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE MODEL WITH AN ASPECT RATIO 4 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - HIGH-LIFT DEVICES AND LATERAL CONTROLS. Ralph W. Franks. February 1953. 45p. diagrs., photo., 2 tabs. (NACA RM A52K13)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF TWO AIRPLANE MODELS HAVING ASPECT RATIO 2 TRAPEZOIDAL WINGS OF TAPER RATIOS 0.33 AND 0.20. Ralph W. Franks. February 1953. 56p. diagrs., photos., 3 tabs. (NACA RM A52L16)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 3 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LONGITUDINAL AND LATERAL CHARACTERISTICS. David G. Koenig. April 1953. 61p. diagrs., photos., 4 tabs. (NACA RM A52L15)

LOW-SPEED AILERON EFFECTIVENESS AS DETERMINED BY FORCE TESTS AND VISUAL-FLOW OBSERVATIONS ON A 52° SWEPTBACK WING WITH AND WITHOUT CHORD-EXTENSIONS. Patrick A. Cancro. April 1953. 38p. diagrs., photos. (NACA RM L53B26)

THE EFFECT AT HIGH SUBSONIC SPEEDS OF A FLAP-TYPE AILERON ON THE CHORDWISE PRESSURE DISTRIBUTION NEAR MIDSEMISPAN OF A TAPERED 35° SWEPTBACK WING OF ASPECT RATIO 4 HAVING NACA 65A006 AIRFOIL SECTION. Alexander D. Hammond and Barbara M. Keffer. May 1953. 89p. diagrs., tab. (NACA RM L53C23)

AILERON AND ELEVATOR HINGE MOMENTS OF THE BELL X-1 AIRPLANE MEASURED IN TRANSONIC FLIGHT. Hubert M. Drake and John B. McKay. June 1953. 27p. diagrs. (NACA RM L53E04)

THE LATERAL CONTROL CHARACTERISTICS OF CONSTANT-PERCENT-CHORD TRAILING-EDGE ELEVONS ON A POINTED WING OF ASPECT RATIO 2 AT MACH NUMBERS UP TO 0.95. Verlin D. Reed and Donald W. Smith. August 1953. 105p. diagrs., photo., tabs. (NACA RM A53F03)

SOME EFFECTS OF AEROELASTICITY AND SWEEPBACK ON THE ROLLING EFFECTIVENESS AND DRAG OF A 1 11-SCALE MODEL OF THE BELL X-5 AIRPLANE WING AT MACH NUMBERS FROM 0.6 TO 1.5. Roland D. English. November 1953. 21p. diagrs., photos. (NACA RM L53I18b)

CHORDWISE PRESSURES AND SECTION FORCE AND MOMENT COEFFICIENTS AT HIGH SUBSONIC SPEEDS NEAR MIDSPAN OF A TAPERED 35° SWEPTBACK WING WITH A FLAP-TYPE CONTROL AND AN ATTACHED TAB. Alexander D. Hammond and Barbara M. Keffer. March 1954. 57p. diagrs., 35 tabs. (NACA RM L54A22)

HINGE-MOMENT, LIFT, AND PITCHING-MOMENT CHARACTERISTICS OF A FLAP-TYPE CONTROL SURFACE HAVING VARIOUS HINGE-LINE LOCATIONS ON A 4-PERCENT-THICK 60° DELTA WING. TRANSONIC-BUMP METHOD. Robert F. Thompson March 1954. 73p. diagrs., photo. (NACA RM L54B08)

COMPARISON BETWEEN THEORETICAL AND EXPERIMENTAL RATES OF ROLL OF TWO MODELS WITH FLEXIBLE RECTANGULAR WINGS AT SUPERSONIC SPEEDS. John M. Hedgepeth and Robert J. Kell. August 1954. 21p. diagrs., photo., tabs. (NACA RM L54F23)

SOME EFFECTS OF EXTERNAL WING TIP STORES ON THE ROLLING EFFECTIVENESS AND DRAG OF PLAIN AND HALF-DELTA TIP AILERONS ON A 4-PERCENT-THICK, TAPERED, UNSWEPT WING. Roland D. English. August 1954. 14p. diagrs., photos., tab. (NACA RM L54F29a)

CALCULATED SPANWISE LIFT DISTRIBUTIONS, INFLUENCE FUNCTIONS, AND INFLUENCE COEFFICIENTS FOR UNSWEPT WINGS IN SUBSONIC FLOW. Franklin W. Diederich and Martin Zlotnick. 1955. ii, 69p. diagrs., tabs. (NACA Rept. 1228. Supersedes TN 3014)

SUMMARY OF RESULTS OF A WIND-TUNNEL INVESTIGATION OF NINE RELATED HORIZONTAL TAILS. Jules B. Dods, Jr. and Bruce E. Tinling. July 1955. 105p. diagrs., 2 tabs. (NACA TN 3497. Formerly RM A51G31a)

THEORETICAL ANALYSES TO DETERMINE UNBALANCED TRAILING-EDGE CONTROLS HAVING MINIMUM HINGE MOMENTS DUE TO DEFLECTION AT SUPERSONIC SPEEDS. Kennith L. Goin. August 1955.52p. diagrs., tab. (NACA TN 3471. Formerly RM L51F19)

CALCULATED SPANWISE LIFT DISTRIBUTIONS AND AERODYNAMIC INFLUENCE COEFFICIENTS FOR SWEPT WINGS IN SUBSONIC FLOW. Franklin W. Diederich and Martin Zlotnick. October 1955. 173p. diagrs., tabs. (NACA TN 3476)

THEORETICAL ANALYSIS OF LINKED LEADING-EDGE AND TRAILING-EDGE FLAP-TYPE CONTROLS AT SUPERSONIC SPEEDS. E. Carson Yates, Jr. March 1956. 40p. diagrs., tab. (NACA TN 3617)

INVESTIGATION BY THE TRANSONIC-BUMP METHOD OF A 35° SWEPTBACK SEMISPAN MODEL EQUIPPED WITH A FLAP OPERATED BY A SERIES OF SERVOVANES LOCATED AHEAD OF AND GEARED TO THE FLAP. William H. Phillips and Robert F. Thompson. April 1956. 39p. diagrs., photo. (NACA TN 3689. Supersedes RM L51J10)

A WIND-TUNNEL INVESTIGATION OF A 0.4-SCALE MODEL OF AN ASSAULT-TRANSPORT AIRPLANE WITH BOUNDARY-LAYER CONTROL APPLIED. Marvin P. Fink, Bennie W. Cocke, and Stanley Lipson. May 1956. 63p. diagrs., photos. (NACA RM L55G26a)

(1. 2. 2. 4. 2) Spoilers

LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF A SEMISPAN WIND-TUNNEL MODEL OF A TAILLESS AIRPLANE AND A COMPARISON WITH COMPLETE-MODEL WIND-TUNNEL TESTS AND SEMISPAN-MODEL WING-FLOW TESTS. Kenneth W. Goodson and Thomas J. King, Jr. October 10, 1949. 63p. diagrs., photos. (NACA RM L9C31)

LOW-SPEED LATERAL-CONTROL CHARACTERISTICS OF AN UNSWEPT WING WITH HEXAGONAL AIRFOIL SECTIONS AND ASPECT RATIO 2.5 EQUIPPED WITH SPOILERS AND WITH SHARP- AND THICKENED-TRAILING-EDGE FLAP-TYPE AILERONS AT A REYNOLDS NUMBER OF 7.6×10^6. James E. Fitzpatrick and Robert L. Woods. April 1952. 58p. photos., diagrs., tab. (NACA RM L52B15)

CHORDWISE PRESSURE DISTRIBUTION AT HIGH SUBSONIC SPEEDS NEAR MIDSEMISPAN OF A TAPERED 35° SWEPTBACK WING OF ASPECT RATIO 4 HAVING NACA 65A006 AIRFOIL SECTIONS AND EQUIPPED WITH VARIOUS SPOILER AILERONS. Alexander D. Hammond and Barbara M. McMullan. June 1952. 76p. diagrs., tabs. (NACA RM L52C28)

WIND-TUNNEL INVESTIGATION AT HIGH SUBSONIC SPEEDS OF A SPOILER-SLOT-DEFLECTOR COMBINATION ON AN NACA 65A006 WING WITH QUARTER-CHORD LINE SWEPT BACK 32.6°. Raymond D. Vogler. May 1953. 24p. diagrs. (NACA RM L53D17)

LOW-SPEED WIND-TUNNEL INVESTIGATION OF A JET CONTROL ON A 35° SWEPT WING. John G. Lowry and Thomas R. Turner. October 1953. 9p. diagrs. (NACA RM L53I09a)

EFFECT AT TRANSONIC SPEEDS OF INBOARD SPOILERS ON THE STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A 45° SWEPTBACK WING-BODY COMBINATION HAVING A LEADING-EDGE CHORD-EXTENSION. James H. Henderson. June 1954. 24p. diagrs., photo. (NACA RM L54D13)

INVESTIGATION BY THE TRANSONIC-BUMP METHOD OF A 35° SWEPTBACK SEMISPAN MODEL EQUIPPED WITH A FLAP OPERATED BY A SERIES OF SERVOVANES LOCATED AHEAD OF AND GEARED TO THE FLAP. William H. Phillips and Robert F. Thompson. April 1956. 39p. diagrs., photo. (NACA TN 3689. Supersedes RM L51J10)

AN INVESTIGATION OF FORWARD-LOCATED FIXED SPOILERS AND DEFLECTORS AS GUST ALLEVIATORS ON AN UNSWEPT-WING MODEL. Delwin R. Croom, C. C. Shufflebarger, and Jarrett K. Huffman. June 1956. 26p. diagrs., photo. (NACA TN 3705)

(1. 2. 2. 4. 3) All Movable

ROLLING EFFECTIVENESS OF ALL-MOVABLE WINGS AT SMALL ANGLES OF INCIDENCE AT MACH NUMBERS FROM 0.6 TO 1.6. H. Kurt Strass and Edward T. Marley. October 1951. 16p. diagrs., photo., tab. (NACA RM L51H03)

THE STATIC LONGITUDINAL CHARACTERISTICS AT MACH NUMBERS UP TO 0.95 OF A TRIANGULAR-WING CANARD MODEL HAVING A TRIANGULAR CONTROL. Jack D. Stephenson and Ralph Selan. December 1951. 72p. diagrs., photo. (NACA RM A51I07)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 2 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LATERAL CHARACTERISTICS. David Graham and David G. Koenig. February 1952. 38p. diagrs., 2 tabs. (NACA RM A51L03)

AN APPROXIMATION TO THE EFFECT OF GEOMETRIC DIHEDRAL ON THE ROLLING MOMENT DUE TO SIDESLIP FOR WINGS AT TRANSONIC AND SUPERSONIC SPEEDS. Paul E. Purser. April 1952. 10p. diagrs. (NACA RM L52B01)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 3 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LONGITUDINAL AND LATERAL CHARACTERISTICS. David G. Koenig. April 1953. 61p. diagrs., photos., 4 tabs. (NACA RM A52L15)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH A VARIABLE-INCIDENCE TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL. David G. Koenig. June 1953. 42p. diagrs., photo., tabs. (NACA RM A53D21)

LARGE-SCALE LOW-SPEED WIND-TUNNEL TESTS OF A MODEL HAVING A 60° DELTA HORIZONTAL CANARD CONTROL SURFACE AND WING TO OBTAIN STATIC-LONGITUDINAL-STABILITY AND CANARD-SURFACE HINGE-MOMENT DATA. Dale L. Burrows. June 1954. 21p. diagrs. (NACA RM L54D16a)

SOME EFFECTS OF EXTERNAL WING TIP STORES ON THE ROLLING EFFECTIVENESS AND DRAG OF PLAIN AND HALF-DELTA TIP AILERONS ON A 4-PERCENT-THICK, TAPERED, UNSWEPT WING. Roland D. English. August 1954. 14p. diagrs., photos., tab. (NACA RM L54F29a)

(1. 2. 2. 5)
REYNOLDS NUMBER EFFECTS

EFFECTS OF SWEEP ON CONTROLS. John G. Lowry, John A. Axelson, and Harold I. Johnson. June 3, 1948. 29p. diagrs. (NACA RM L8A28c)

THE TRANSONIC CHARACTERISTICS OF A LOW-ASPECT-RATIO TRIANGULAR WING WITH A CONSTANT-CHORD FLAP AS DETERMINED BY WING-FLOW TESTS, INCLUDING CORRELATION WITH LARGE-SCALE TESTS. George A. Rathert, Jr., L. Stewart Rolls, and Carl M. Hanson. July 18, 1950. 39p. diagrs., photo. (NACA RM A50E10)

CHARACTERISTICS THROUGHOUT THE SUBSONIC SPEED RANGE OF A PLANE WING AND OF A CAMBERED AND TWISTED WING, BOTH HAVING 45° OF SWEEPBACK. Ben H. Johnson, Jr., and Harry H. Shibata. July 1951. 122p. diagrs., photos. (NACA RM A51D27)

THE EFFECTS OF REYNOLDS NUMBER AT MACH NUMBERS UP TO 0.94 ON THE LOADING ON A 35° SWEPTBACK WING HAVING NACA 65_1A012 STREAMWISE SECTIONS. Bruce E. Tinling and Armando E. Lopez. June 1952. 115p. diagrs., photos., tabs. (NACA RM A52B20)

AN INVESTIGATION THROUGHOUT THE SUBSONIC SPEED RANGE OF A FULL-SPAN AND A SEMI-SPAN MODEL OF A PLANE WING AND OF A CAMBERED AND TWISTED WING, ALL HAVING 45° OF SWEEPBACK. Harry H. Shibata, Angelo Bandettini, and Joseph Cleary. June 1952. 65p. diagrs., photos. (NACA RM A52D01)

THE LONGITUDINAL CHARACTERISTICS AT MACH NUMBERS UP TO 0.92 OF A CAMBERED AND TWISTED WING HAVING 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. George G. Edwards, Bruce E. Tinling, and Arthur C. Ackerman. September 1952. 71p. diagrs., photos., tab. (NACA RM A52F18)

PRESSURE DISTRIBUTION AT MACH NUMBERS UP TO 0.90 ON A CAMBERED AND TWISTED WING HAVING 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10, INCLUDING THE EFFECTS OF FENCES. Frederick W. Boltz and Harry H. Shibata. March 1953. 133p. diagrs., photos., tabs. (NACA RM A52K20)

WIND-TUNNEL INVESTIGATION OF STALL CONTROL BY SUCTION THROUGH A POROUS LEADING EDGE ON A 37° SWEPTBACK WING OF ASPECT RATIO 6 AT REYNOLDS NUMBERS FROM 2.50×10^6 to 8.10×10^6. Robert R. Graham and William A. Jacques. March 1953. 67p. diagrs., photo., 2 tabs. (NACA RM L52L05)

THE EFFECTS OF LEADING-EDGE EXTENSIONS, A TRAILING-EDGE EXTENSION, AND A FENCE ON THE STATIC LONGITUDINAL STABILITY OF A WING-FUSELAGE-TAIL COMBINATION HAVING A WING WITH 35° OF SWEEPBACK AND AN ASPECT RATIO OF 4.5. Ralph Selan and Angelo Bandettini. August 1953. 81p. diagrs., photos., tabs. (NACA RM A53E12)

THE LATERAL CONTROL CHARACTERISTICS OF CONSTANT-PERCENT-CHORD TRAILING-EDGE ELEVONS ON A POINTED WING OF ASPECT RATIO 2 AT MACH NUMBERS UP TO 0.95. Verlin D. Reed and Donald W. Smith. August 1953. 105p. diagrs., photo., tabs. (NACA RM A53F03)

EFFECT OF REDUCTION IN THICKNESS FROM 6 TO 2 PERCENT AND REMOVAL OF THE POINTED TIPS ON THE SUBSONIC STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A 60° TRIANGULAR WING IN COMBINATION WITH A FUSELAGE. William E. Palmer. August 1953. 44p. diagrs., photo., tab. (NACA RM L53F24)

WIND-TUNNEL INVESTIGATION AT HIGH AND LOW SUBSONIC MACH NUMBERS OF TWO UNSWEPT WINGS HAVING NACA 2-006 AND NACA 65A006 AIRFOIL SECTIONS. Stanley F. Racisz. December 1953. 40p. diagrs., photo., tab. (NACA RM L53J29)

THE EFFECTS OF HORIZONTAL-TAIL HEIGHT AND A PARTIAL-SPAN LEADING-EDGE EXTENSION ON THE STATIC LONGITUDINAL STABILITY OF A WING-FUSELAGE-TAIL COMBINATION HAVING A SWEPTBACK WING. Angelo Bandettini and Ralph Selan. March 1954. 54p. diagrs., photos., 2 tabs. (NACA RM A53J07)

SUBSONIC INVESTIGATION OF EFFECTS OF BODY INDENTATION ON ZERO-LIFT DRAG CHARACTERISTICS OF A 45° SWEPTBACK WING-BODY COMBINATION WITH NATURAL AND FIXED BOUNDARY-LAYER TRANSITION THROUGH A RANGE OF REYNOLDS NUMBER FROM 1×10^6 TO 8×10^6. Gene J. Bingham and Albert L. Braslow. April 1954. 10p. diagrs., photos. (NACA RM L54B18a)

EFFECT OF GROUND INTERFERENCE ON THE AERODYNAMIC AND FLOW CHARACTERISTICS OF A 42° SWEPTBACK WING AT REYNOLDS NUMBERS UP TO 6.8×10^6. G. Chester Furlong and Thomas V. Bollech. 1955. ii, 60p. diagrs., photos., tab. (NACA Rept. 1218. Combination of RM L8G22; TN 2487)

(1. 2. 2. 6)
MACH NUMBER EFFECTS

FREE-FLIGHT INVESTIGATION OF CONTROL EFFECTIVENESS OF FULL-SPAN, 0.2-CHORD PLAIN AILERONS AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS TO DETERMINE SOME EFFECTS OF WING SWEEPBACK, TAPER, ASPECT RATIO, AND SECTION-THICKNESS RATIO. Carl A. Sandahl. August 13, 1947. 16p. diagrs., photos., tab. (NACA RM L7F30)

FLIGHT INVESTIGATION TO DETERMINE THE HINGE MOMENTS OF A BEVELED-EDGE AILERON ON A 45° SWEPTBACK WING AT TRANSONIC AND LOW SUPERSONIC SPEEDS. William N. Gardner and Howard J. Curfman, Jr. November 12, 1947. 20p. diagrs., photos. (NACA RM L7H26)

THE HIGH-SPEED AERODYNAMIC EFFECTS OF MODIFICATIONS TO THE WING AND WING-FUSELAGE INTERSECTION OF AN AIRPLANE MODEL WITH THE WING SWEPT BACK 35°. Lee E. Boddy and Charles P. Morrill, Jr. February 18, 1948. 34p. diagrs., photos. (NACA RM A7J02)

HIGH-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A FIGHTER AIRPLANE MODEL WITH A SWEPT-BACK WING AND TAIL. Charles P. Morrill, Jr., and Lee E. Boddy. April 14, 1948. 47p. diagrs., photos. (NACA RM A7K28)

THE AERODYNAMIC EFFECTS OF ROCKETS AND FUEL TANKS MOUNTED UNDER THE SWEPT-BACK WING OF AN AIRPLANE MODEL. Lee E. Boddy and Charles P. Morrill. Jr. April 23. 1948. 19p. diagrs. (NACA RM A7J03)

ADDITIONAL RESULTS IN A FREE-FLIGHT INVESTIGATION OF CONTROL EFFECTIVENESS OF FULL-SPAN, 0.2-CHORD PLAIN AILERONS AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS TO DETERMINE SOME EFFECTS OF WING SWEEPBACK, ASPECT RATIO, TAPER, AND SECTION THICKNESS RATIO. Carl A. Sandahl and H. Kurt Strass. April 23, 1948. 31p. diagrs., photos. (NACA RM L7L01)

EFFECTS OF SWEEP ON CONTROLS. John G. Lowry, John A. Axelson, and Harold I. Johnson. June 3, 1948. 29p. diagrs. (NACA RM L8A28c)

FREE-FLIGHT INVESTIGATION OF THE ROLLING EFFECTIVENESS AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS OF LEADING-EDGE AND TRAILING-EDGE AILERONS IN CONJUNCTION WITH TAPERED AND UNTAPERED PLAN FORMS. H. Kurt Strass. July 23, 1948. 19p. diagrs., photos. (NACA RM L8E10)

FREE-FLIGHT INVESTIGATION OF THE ROLLING EFFECTIVENESS OF SEVERAL DELTA WING - AILERON CONFIGURATIONS AT TRANSONIC AND SUPERSONIC SPEEDS. Carl A. Sandahl. August 27, 1948. 19p. diagrs., photos., tab. (NACA RM L8D16)

PRELIMINARY RESULTS OF NACA TRANSONIC FLIGHTS OF THE XS-1 AIRPLANE WITH 10-PERCENT-THICK WING AND 8-PERCENT-THICK HORIZONTAL TAIL. Hubert M. Drake, Harold R. Goodman, and Herbert H. Hoover. October 13, 1948. 18p. diagrs., photos. (NACA RM L8I29)

FREE-FLIGHT INVESTIGATION AT TRANSONIC AND SUPERSONIC SPEEDS OF THE ROLLING EFFECTIVENESS OF A THIN, UNSWEPT WING HAVING PARTIAL-SPAN AILERONS. Carl A. Sandahl. October 22, 1948. 13p. diagrs., photos., tab. (NACA RM L8G20a)

INVESTIGATION OF A THIN WING OF ASPECT RATIO 4 IN THE AMES 12-FOOT PRESSURE WIND TUNNEL. III - THE EFFECTIVENESS OF A CONSTANT-CHORD AILERON. Ben H. Johnson, Jr., and Fred A. Demele. November 19, 1948. 26p. diagrs., photo. (NACA RM A8I17)

FREE-FLIGHT INVESTIGATION AT TRANSONIC AND SUPERSONIC SPEEDS OF THE ROLLING EFFECTIVENESS OF SEVERAL AILERON CONFIGURATIONS ON A TAPERED WING HAVING 42.7° SWEEPBACK. Carl A. Sandahl. January 11, 1949. 23p. diagrs., photos., tab. (NACA RM L8K23)

HIGH-SPEED WIND-TUNNEL INVESTIGATION OF A SWEPTBACK WING WITH AN ADDED TRIANGULAR AREA AT THE CENTER. Beverly Z. Henry, Jr. January 14, 1949. 24p. diagrs., tabs. (NACA RM L8J12)

WIND-TUNNEL INVESTIGATION OF A TAILLESS TRIANGULAR-WING FIGHTER AIRCRAFT AT MACH NUMBERS FROM 0.5 TO 1.5. Leslie F. Lawrence and James L. Summers. June 24, 1949. 56p. diagrs., photos., tab. (NACA RM A9B16)

EFFECTS OF SOME AIRFOIL-SECTION VARIATIONS ON WING-AILERON ROLLING EFFECTIVENESS AND DRAG AS DETERMINED IN FREE FLIGHT AT TRANSONIC AND SUPERSONIC SPEEDS. Carl A. Sandahl, William M. Bland, Jr., and H. Kurt Strass. July 22, 1949. 29p. diagrs., photos., tabs. (NACA RM L9D12)

AERODYNAMIC CHARACTERISTICS AND FLYING QUALITIES OF A TAILLESS TRIANGULAR-WING AIRPLANE CONFIGURATION AS OBTAINED FROM FLIGHTS OF ROCKET-PROPELLED MODELS AT TRANSONIC AND LOW SUPERSONIC SPEEDS. Grady L. Mitcham, Joseph E. Stevens, and Harry P. Norris. February 9, 1950. 67p. diagrs., photos., tabs. (NACA RM L9L07)

THE EFFECT OF SPANWISE AILERON LOCATION ON THE ROLLING EFFECTIVENESS OF WINGS WITH 0° AND 45° SWEEP AT SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS. H. Kurt Strass. April 25, 1950. 28p. diagrs., photo. (NACA RM L50A27)

FREE-FLIGHT INVESTIGATION AT TRANSONIC AND SUPERSONIC SPEEDS OF THE ROLLING EFFECTIVENESS OF A PARTIAL-SPAN AILERON ON AN INVERSELY TAPERED SWEPTBACK WING. H. Kurt Strass, E. M. Fields, and E. D. Schult. May 1, 1950. 17p. diagrs., photo., tabs. (NACA RM L50B08)

WING-DROPPING CHARACTERISTICS OF SOME STRAIGHT AND SWEPT WINGS AT TRANSONIC SPEEDS AS DETERMINED WITH ROCKET-POWERED MODELS. David G. Stone. May 26, 1950. 12p. diagrs., tab. (NACA RM L50C01)

THE TRANSONIC CHARACTERISTICS OF A LOW-ASPECT-RATIO TRIANGULAR WING WITH A CONSTANT-CHORD FLAP AS DETERMINED BY WING-FLOW TESTS, INCLUDING CORRELATION WITH LARGE-SCALE TESTS. George A. Rathert, Jr., L. Stewart Rolls, and Carl M. Hanson. July 18, 1950. 39p. diagrs., photo. (NACA RM A50E10)

EXPERIMENTAL INVESTIGATION OF VARIOUS WING-MOUNTED EXTERNAL STORES ON A WING-FUSELAGE COMBINATION HAVING A SWEPTBACK WING OF INVERSE TAPER RATIO. Kenneth P. Spreemann and H. Norman Silvers. September 15, 1950. 29p. diagrs., photos., tab. (NACA RM L9J06)

EXPERIMENTAL DETERMINATION OF EFFECT OF STRUCTURAL RIGIDITY ON ROLLING EFFECTIVENESS OF SOME STRAIGHT AND SWEPT WINGS AT MACH NUMBERS FROM 0.7 TO 1.7. H. Kurt Strass, E. M. Fields, and Paul E. Purser. October 4, 1950. 40p. diagrs., photo., tab. (NACA RM L50G14b)

A TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. WING-FUSELAGE CONFIGURATION WITH A WING OF 45° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Robert S. Osborne. October 10, 1950. 49p. diagrs., photos. (NACA RM L50H08)

TABULATED PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS MEASURED ON THE WING OF THE BELL X-1 AIRPLANE IN PULL-UPS AT MACH NUMBERS FROM 0.53 TO 0.99. Ronald J. Knapp and Gertrude V. Wilken. November 1, 1950. 77p. diagrs., photo., 11 tabs. (NACA RM L50H28)

A TRANSONIC WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. WING-FUSELAGE CONFIGURATION HAVING A WING OF 35° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Beverly Z. Henry, Jr. November 15, 1950. 40p. diagrs., photo., tab (NACA RM L50J09)

A TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. WING-FUSELAGE CONFIGURATION HAVING A WING OF 60° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Raymond B. Wood and Frank F. Fleming. January 24, 1951. 43p. diagrs., photo. (NACA RM L50J25)

AERODYNAMIC CHARACTERISTICS INCLUDING PRESSURE DISTRIBUTIONS OF A FUSELAGE AND THREE COMBINATIONS OF THE FUSELAGE WITH SWEPT-BACK WINGS AT HIGH SUBSONIC SPEEDS. Fred B. Sutton and Andrew Martin. February 6, 1951. 117p. diagrs., photos., tabs. (NACA RM A50J26a)

PRELIMINARY FLIGHT INVESTIGATION OF THE MANEUVERING ACCELERATIONS AND BUFFET BOUNDARY OF A 35° SWEPT-WING AIRPLANE AT HIGH ALTITUDE AND TRANSONIC SPEEDS. George A. Rathert, Jr., Howard L. Ziff, and George E. Cooper. February 21, 1951. 12p. diagrs., photo., tab. (NACA RM A50L04)

INVESTIGATION OF THE EFFECTS OF GEOMETRIC CHANGES IN AN UNDERWING PYLON-SUSPENDED EXTERNAL-STORE INSTALLATION ON THE AERODYNAMIC CHARACTERISTICS OF A 45° SWEPTBACK WING AT HIGH SUBSONIC SPEEDS. Kenneth P. Spreemann and William J. Alford, Jr. March 5, 1951. 91p. diagrs., photos., tabs. (NACA RM L50L12)

A TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. WING-FUSELAGE CONFIGURATION HAVING A WING OF 0° SWEEPBACK, ASPECT RATIO 4.0, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Maurice S. Cahn and Carroll R. Bryan. March 6, 1951. 37p. diagrs., photos. (NACA RM L51A02)

WIND-TUNNEL INVESTIGATION AT SUBSONIC AND LOW TRANSONIC SPEEDS OF THE EFFECTS OF AILERON SPAN AND SPANWISE LOCATION ON THE ROLLING CHARACTERISTICS OF A TEST VEHICLE WITH THREE UNTAPERED 45° SWEPTBACK WINGS. Harold S. Johnson. April 6, 1951. 26p. diagrs., photo., tab. (NACA RM L51B16)

COMPARISONS OF THE EFFECTIVENESS AND HINGE MOMENTS OF ALL-MOVABLE DELTA AND FLAP-TYPE CONTROLS ON VARIOUS WINGS. David G. Stone. April 19, 1951. 13p. diagrs. (NACA RM L51C22)

A COMPARISON OF THE EXPERIMENTAL AND THEORETICAL LOADING OVER TRIANGULAR WINGS IN SIDESLIP AT SUPERSONIC SPEEDS. John W. Boyd. May 18, 1951. 58p. diagrs., photo., tabs. (NACA RM A51C13)

REVIEW OF SOME RECENT DATA ON BUFFET BOUNDARIES. Paul E. Purser and John A. Wyss. May 23, 1951. 11p. diagrs. (NACA RM L51E02a)

SOME EFFECTS OF SPANWISE AILERON LOCATION AND WING STRUCTURAL RIGIDITY ON THE ROLLING EFFECTIVENESS OF 0.3-CHORD FLAP-TYPE AILERONS ON A TAPERED WING HAVING 63° SWEEPBACK AT THE LEADING EDGE AND NACA 64A005 AIRFOIL SECTIONS. H. Kurt Strass, E. M. Fields, and Eugene D. Schult. June 1951. 25p. diagrs., photo., tab. (NACA RM L51D18a)

AERODYNAMIC CHARACTERISTICS OF FOUR WINGS OF SWEEPBACK ANGLES 0°, 35°, 45°, AND 60°, NACA 65A006 AIRFOIL SECTION, ASPECT RATIO 4, AND TAPER RATIO 0.6 IN COMBINATION WITH A FUSELAGE AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. Arvo A. Luoma. June 6, 1951. 59p. diagrs., photo., tab. (NACA RM L51D13)

TABULATED PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS MEASURED ON THE WING OF THE BELL X-1 AIRPLANE IN AN UNACCELERATED STALL AND IN PULL-UPS AT MACH NUMBERS OF 0.74, 0.75, 0.94, AND 0.97. Lawrence A. Smith. June 19, 1951. 49p. diagrs., photo., tabs. (NACA RM L51B23)

CHARACTERISTICS THROUGHOUT THE SUBSONIC SPEED RANGE OF A PLANE WING AND OF A CAMBERED AND TWISTED WING, BOTH HAVING 45° OF SWEEPBACK. Ben H. Johnson, Jr., and Harry H. Shibata. July 1951. 122p. diagrs., photos. (NACA RM A51D27)

INVESTIGATION OF THE EFFECTS OF TWIST AND CAMBER ON THE AERODYNAMIC CHARACTERISTICS OF A 50° 38' SWEPTBACK WING OF ASPECT RATIO 2.98. TRANSONIC-BUMP METHOD. Kenneth P. Spreemann and William J. Alford, Jr. August 1951. 33p. diagrs., photos., tab. (NACA RM L51C16)

TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. ANALYSIS OF PRESSURE DISTRIBUTION OF WING-FUSELAGE CONFIGURATION HAVING A WING OF 45° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Donald L. Loving and Bruce B. Estabrooks. September 1951. 132p. diagrs., photos. (NACA RM L51F07)

INVESTIGATION OF THE EFFECT OF A NACELLE AT VARIOUS CHORDWISE AND VERTICAL POSITIONS ON THE AERODYNAMIC CHARACTERISTICS AT HIGH SUBSONIC SPEEDS OF A 45° SWEPTBACK WING WITH AND WITHOUT A FUSELAGE. H. Norman Silvers, Thomas J. King, Jr., and Thomas B. Pasteur, Jr. September 1951. 71p. diagrs., photos., 3 tabs. (NACA RM L51H16)

SOME EFFECTS OF FUSELAGE INTERFERENCE, WING INTERFERENCE AND SWEEPBACK ON THE DAMPING IN ROLL OF UNTAPERED WINGS AS DETERMINED BY TECHNIQUES EMPLOYING ROCKET-PROPELLED VEHICLES. William M. Bland, Jr., and Albert E. Dietz. October 1951. 27p. diagrs., photos. (NACA RM L51D25)

ROLLING EFFECTIVENESS OF ALL-MOVABLE WINGS AT SMALL ANGLES OF INCIDENCE AT MACH NUMBERS FROM 0.6 TO 1.6. H. Kurt Strass and Edward T. Marley. October 1951. 16p. diagrs., photo., tab. (NACA RM L51H03)

DAMPING IN ROLL OF STRAIGHT AND 45° SWEPT WINGS OF VARIOUS TAPER RATIOS DETERMINED AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS WITH ROCKET-POWERED MODELS. E. Claude Sanders, Jr. October 1951. 15p. diagrs. (NACA RM L51H14)

WIND-TUNNEL INVESTIGATION OF THE AERODYNAMIC CHARACTERISTICS IN PITCH OF WING-FUSELAGE COMBINATIONS AT HIGH SUBSONIC SPEEDS. ASPECT-RATIO SERIES. Richard E. Kuhn and James W. Wiggins. April 1952. 42p. diagrs., photos., tab. (NACA RM L52A29)

TRANSONIC DRAG CHARACTERISTICS AND PRESSURE DISTRIBUTION ON THE BODY OF A WING-BODY COMBINATION CONSISTING OF A BODY OF REVOLUTION OF FINENESS RATIO 12 AND A WING HAVING SWEEPBACK OF 45°, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTIONS. Max C. Kurbjun and Jim Rogers Thompson. April 1952. 28p. diagrs., photo., tabs. (NACA RM L52B12)

THE EFFECTS OF REYNOLDS NUMBER AT MACH NUMBERS UP TO 0.94 ON THE LOADING ON A 35° SWEPTBACK WING HAVING NACA 65_1A012 STREAMWISE SECTIONS. Bruce E. Tinling and Armando E. Lopez. June 1952. 115p. diagrs., photos., tabs. (NACA RM A52B20)

AN INVESTIGATION THROUGHOUT THE SUBSONIC SPEED RANGE OF A FULL-SPAN AND A SEMI-SPAN MODEL OF A PLANE WING AND OF A CAMBERED AND TWISTED WING, ALL HAVING 45° OF SWEEPBACK. Harry H. Shibata, Angelo Bandettini, and Joseph Cleary. June 1952. 65p. diagrs., photos. (NACA RM A52D01)

A STUDY OF THE FLOW OVER A 45° SWEPTBACK WING-FUSELAGE COMBINATION AT TRANSONIC MACH NUMBERS. Richard T. Whitcomb and Thomas C. Kelly. June 1952. 60p. diagrs., photos. (NACA RM L52D01)

DAMPING IN ROLL OF MODELS WITH 45°, 60°, AND 70° DELTA WINGS DETERMINED AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS WITH ROCKET-POWERED MODELS. E. Claude Sanders, Jr. June 1952. 18p. diagrs., photos. (NACA RM L52D22a)

WIND-TUNNEL INVESTIGATION OF THE AERODYNAMIC CHARACTERISTICS IN PITCH OF WING-FUSELAGE COMBINATIONS AT HIGH-SUBSONIC SPEEDS. SWEEP SERIES. James W. Wiggins and Richard E. Kuhn. July 1952. 41p. diagrs., photos. (NACA RM L52D18)

RESULTS OF TWO EXPERIMENTS ON FLUTTER OF HIGH-ASPECT-RATIO SWEPT WINGS IN THE TRANSONIC SPEED RANGE. W. T. Lauten, Jr., and Burke R. O'Kelly. July 1952. 22p. diagrs., photos., tabs. (NACA RM L52D24b)

EFFECT OF FUSELAGE INTERFERENCE ON THE DAMPING IN ROLL OF DELTA WINGS OF ASPECT RATIO 4 IN THE MACH NUMBER RANGE BETWEEN 0.6 AND 1.6 AS DETERMINED WITH ROCKET-PROPELLED VEHICLES. William M. Bland, Jr. July 1952. 13p. diagrs., photos. (NACA RM L52E13)

EFFECT OF CAMBER AND TWIST ON THE STABILITY CHARACTERISTICS OF MODELS HAVING A 45° SWEPT WING AS DETERMINED BY THE FREE-FALL METHOD AT TRANSONIC SPEEDS. Maurice D. White. August 1952. 35p. diagrs., photos., tab. (NACA RM A52F16)

(1) AERODYNAMICS

TRANSONIC FLIGHT TESTS TO DETERMINE THE EFFECT OF THICKNESS RATIO AND PLAN-FORM MODIFICATION ON THE ZERO-LIFT DRAG OF A 45° SWEPTBACK WING. William B. Pepper, Jr., and Sherwood Hoffman. August 1952. 24p. diagrs., photos., tabs. (NACA RM L52F02a)

FREE-FLIGHT TESTS AT MACH NUMBERS FROM 0.8 TO 1.4 TO DETERMINE THE EFFECT ON ZERO-LIFT DRAG OF INCREASING THE LEADING-EDGE BLUNTNESS OF A 45° SWEPTBACK WING HAVING AN NACA 65A009 AIRFOIL. William B. Pepper, Jr. August 1952. 15p. diagrs., photos., tabs. (NACA RM L52F30)

THE LONGITUDINAL CHARACTERISTICS AT MACH NUMBERS UP TO 0.92 OF A CAMBERED AND TWISTED WING HAVING 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. George G. Edwards, Bruce E. Tinling, and Arthur C. Ackerman. September 1952. 71p. diagrs., photos., tab. (NACA RM A52F18)

A STUDY OF THE ZERO-LIFT DRAG-RISE CHARACTERISTICS OF WING-BODY COMBINATIONS NEAR THE SPEED OF SOUND. Richard T. Whitcomb. September 1952. 41p. diagrs., photos., 3 tabs. (NACA RM L52H08)

THE EFFECTS OF SWEEPBACK ON LONGITUDINAL CHARACTERISTICS OF A 1/30-SCALE SEMISPAN MODEL OF THE BELL X-5 AIRPLANE AS DETERMINED FROM NACA WING-FLOW TESTS AT TRANSONIC SPEEDS. Joseph J. Kolnick and Robert M. Kennedy. November 1952. 48p. diagrs., photos., tab. (NACA RM L52I23)

LOW-LIFT BUFFET CHARACTERISTICS OBTAINED FROM FLIGHT TESTS OF UNSWEPT THIN INTERSECTING SURFACES AND OF THICK 35° SWEPTBACK SURFACES. Homer P. Mason. January 1953. 21p. diagrs., photos. (NACA RM L52H12)

FREE-FLIGHT INVESTIGATION AT ZERO LIFT IN THE MACH NUMBER RANGE BETWEEN 0.7 AND 1.4 TO DETERMINE THE EFFECTIVENESS OF AN INSET TAB AS A MEANS OF AERODYNAMICALLY RELIEVING AILERON HINGE MOMENTS. William M. Bland, Jr., and Edward T. Marley. January 1953. 19p. diagrs., photos. (NACA RM L52K07)

INVESTIGATION OF THE EFFECT OF CHORDWISE POSITIONING AND SHAPE OF AN UNDERWING NACELLE ON THE HIGH-SPEED AERODYNAMIC CHARACTERISTICS OF A 45° SWEPTBACK TAPERED-IN-THICKNESS-RATIO WING OF ASPECT RATIO 6. H. Norman Silvers and Thomas J. King, Jr. January 1953. 50p. diagrs. (NACA RM L52K25)

FLIGHT MEASUREMENTS OF THE STABILITY CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE IN SIDESLIPS AT 59° SWEEPBACK. Joan M. Childs. February 1953. 23p. diagrs., photos., tab. (NACA RM L52K13b)

WIND-TUNNEL INVESTIGATION OF THE STATIC LATERAL STABILITY CHARACTERISTICS OF WING-FUSELAGE COMBINATIONS AT HIGH SUBSONIC SPEEDS. ASPECT-RATIO SERIES. Paul G. Fournier and Andrew L. Byrnes, Jr. February 1953. 26p. diagrs., photos. (NACA RM L52L18)

PRESSURE DISTRIBUTION AT MACH NUMBERS UP TO 0.90 ON A CAMBERED AND TWISTED WING HAVING 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10, INCLUDING THE EFFECTS OF FENCES. Frederick W. Boltz and Harry H. Shibata. March 1953. 133p. diagrs., photos., tabs. (NACA RM A52K20)

WIND-TUNNEL INVESTIGATION OF STALL CONTROL BY SUCTION THROUGH A POROUS LEADING EDGE ON A 37° SWEPTBACK WING OF ASPECT RATIO 6 AT REYNOLDS NUMBERS FROM 2.50×10^6 to 8.10×10^6. Robert R. Graham and William A. Jacques. March 1953. 67p. diagrs., photo., 2 tabs. (NACA RM L52L05)

INVESTIGATIONS OF THE DAMPING IN ROLL OF SWEPT AND TAPERED WINGS AT SUPERSONIC SPEEDS. Russell W. McDearmon and Harry S. Heinke, Jr. March 1953. 35p. diagrs., photos., tab. (NACA RM L53A13)

EXPERIMENTAL INVESTIGATION OF THE EFFECTS OF PLAN-FORM TAPER ON THE AERODYNAMIC CHARACTERISTICS OF SYMMETRICAL UNSWEPT WINGS OF VARYING ASPECT RATIO. Edwin C. Allen. May 1953. 53p. diagrs., photos., tab. (NACA RM A53C19)

THE EFFECT AT HIGH SUBSONIC SPEEDS OF A FLAP-TYPE AILERON ON THE CHORDWISE PRESSURE DISTRIBUTION NEAR MIDSEMISPAN OF A TAPERED 35° SWEPTBACK WING OF ASPECT RATIO 4 HAVING NACA 65A006 AIRFOIL SECTION. Alexander D. Hammond and Barbara M. Keffer. May 1953. 89p. diagrs., tab. (NACA RM L53C23)

FREE-FALL MEASUREMENTS OF THE EFFECTS OF WING-BODY INTERFERENCE ON THE TRANSONIC DRAG CHARACTERISTICS OF SWEPT-WING-SLENDER-BODY CONFIGURATIONS. Max C. Kurbjun and Jim Rogers Thompson. May 1953. 34p. diagrs., photos., tabs. (NACA RM L53C31)

EFFECTS OF HORIZONTAL-TAIL HEIGHT AND A WING LEADING-EDGE MODIFICATION CONSISTING OF A FULL-SPAN FLAP AND A PARTIAL-SPAN CHORD-EXTENSION ON THE AERODYNAMIC CHARACTERISTICS IN PITCH AT HIGH SUBSONIC SPEEDS OF A MODEL WITH A 45° SWEPTBACK WING. William D. Morrison, Jr. and William J. Alford, Jr. June 1953. 37p. diagrs., photo., tab. (NACA RM L53E06)

WIND-TUNNEL INVESTIGATION OF THE AERODYNAMIC CHARACTERISTICS IN PITCH OF WING-FUSELAGE COMBINATIONS AT HIGH SUBSONIC SPEEDS. TAPER-RATIO SERIES. Thomas J. King, Jr. and Thomas B. Pasteur, Jr. June 1953. 37p. diagrs., photos., tab. (NACA RM L53E20)

COMPARISON OF LIFT-CURVE SLOPES FOR A MODEL TESTED IN TWO SLOTTED TUNNELS OF DIFFERENT SIZES AT HIGH SUBSONIC SPEEDS. Robert W. Boswinkle, Jr. June 1953. 13p. diagrs. (NACA RM L53E20a)

A COLLECTION OF DATA FOR ZERO-LIFT DAMPING IN ROLL OF WING-BODY COMBINATIONS AS DETERMINED WITH ROCKET-POWERED MODELS EQUIPPED WITH ROLL-TORQUE NOZZLES. David G. Stone. July 1953. 23p. diagrs., tab. (NACA RM L53E26)

WIND-TUNNEL INVESTIGATION OF THE EFFECTS OF GEOMETRIC DIHEDRAL ON THE AERODYNAMIC CHARACTERISTICS IN PITCH AND SIDESLIP OF AN UNSWEPT- AND A 45° SWEPTBACK-WING FUSELAGE COMBINATION AT HIGH SUBSONIC SPEEDS. Richard E. Kuhn and John W. Draper. July 1953. 41p. diagrs., photos. (NACA RM L53F09)

THE EFFECTS OF LEADING-EDGE EXTENSIONS, A TRAILING-EDGE EXTENSION, AND A FENCE ON THE STATIC LONGITUDINAL STABILITY OF A WING-FUSELAGE-TAIL COMBINATION HAVING A WING WITH 35° OF SWEEPBACK AND AN ASPECT RATIO OF 4.5. Ralph Selan and Angelo Bandettini. August 1953. 81p. diagrs., photos., tabs. (NACA RM A53E12)

THE LATERAL CONTROL CHARACTERISTICS OF CONSTANT-PERCENT-CHORD TRAILING-EDGE ELEVONS ON A POINTED WING OF ASPECT RATIO 2 AT MACH NUMBERS UP TO 0.95. Verlin D. Reed and Donald W. Smith. August 1953. 105p. diagrs., photo., tabs. (NACA RM A53F03)

THE EFFECTS OF FENCES ON THE HIGH-SPEED LONGITUDINAL STABILITY OF A SWEPT-WING AIRPLANE. Richard S. Bray. August 1953. 37p. diagrs., photos., tabs. (NACA RM A53F23)

EFFECT OF REDUCTION IN THICKNESS FROM 6 TO 2 PERCENT AND REMOVAL OF THE POINTED TIPS ON THE SUBSONIC STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A 60° TRIANGULAR WING IN COMBINATION WITH A FUSELAGE. William E. Palmer. August 1953. 44p. diagrs., photo., tab. (NACA RM L53F24)

THEORY OF WING-BODY DRAG AT SUPERSONIC SPEEDS. Robert T. Jones. September 1953. 11p. diagrs. (NACA RM A53H18a)

FLIGHT MEASUREMENTS OF LIFT AND DRAG FOR THE BELL X-1 RESEARCH AIRPLANE HAVING A 10-PERCENT-THICK WING. Edwin J. Saltzman. September 1953. 37p. diagrs., tab. (NACA RM L53F08)

A TRANSONIC WIND-TUNNEL INVESTIGATION OF THE LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF A 0.09-SCALE MODEL OF THE BELL X-5 RESEARCH AIRPLANE AND COMPARISON WITH FLIGHT. Ralph P. Bielat and George S. Campbell. October 1953. 65p. diagrs., photo. (NACA RM L53H18)

SOME EFFECTS OF AEROELASTICITY AND SWEEPBACK ON THE ROLLING EFFECTIVENESS AND DRAG OF A 1/11-SCALE MODEL OF THE BELL X-5 AIRPLANE WING AT MACH NUMBERS FROM 0.6 TO 1.5. Roland D. English. November 1953. 21p. diagrs., photos. (NACA RM L53I18b)

WIND-TUNNEL INVESTIGATION OF THE EFFECTS OF STEADY ROLLING ON THE AERODYNAMIC LOADING CHARACTERISTICS OF A 45° SWEPTBACK WING AT HIGH SUBSONIC SPEEDS. James W. Wiggins and Richard E. Kuhn. November 1953. 22p. diagrs., photos. (NACA RM L53J01a)

DOWNWASH BEHIND A TRIANGULAR WING OF ASPECT RATIO 3 - TRANSONIC BUMP METHOD. John A. Axelson. December 1953. 37p. diagrs., photo., tab. (NACA RM A53I23)

AN EXPERIMENTAL AND THEORETICAL INVESTIGATION AT HIGH SUBSONIC SPEEDS OF THE EFFECTS OF HORIZONTAL-TAIL HEIGHT ON THE AERODYNAMIC CHARACTERISTICS IN SIDESLIP OF AN UNSWEPT, UNTAPERED TAIL ASSEMBLY. Harleth G. Wiley and Donald R. Riley. December 1953. 71p. diagrs., tab. (NACA RM L53J19)

WIND-TUNNEL INVESTIGATION AT HIGH AND LOW SUBSONIC MACH NUMBERS OF TWO UNSWEPT WINGS HAVING NACA 2-006 AND NACA 65A006 AIRFOIL SECTIONS. Stanley F. Racisz. December 1953. 40p. diagrs., photo., tab. (NACA RM L53J29)

THE EFFECTS OF HORIZONTAL-TAIL HEIGHT AND A PARTIAL-SPAN LEADING-EDGE EXTENSION ON THE STATIC LONGITUDINAL STABILITY OF A WING-FUSELAGE-TAIL COMBINATION HAVING A SWEPTBACK WING. Angelo Bandettini and Ralph Selan. March 1954. 54p. diagrs., photos., 2 tabs. (NACA RM A53J07)

THE TRANSONIC CHARACTERISTICS OF UNSWEPT WINGS HAVING ASPECT RATIOS OF 4, SPANWISE VARIATIONS IN THICKNESS RATIO, AND VARIATIONS IN PLAN-FORM TAPER - TRANSONIC-BUMP TECHNIQUE. Warren H. Nelson. March 1954. 29p. diagrs., photo. (NACA RM A53L17)

CHORDWISE PRESSURES AND SECTION FORCE AND MOMENT COEFFICIENTS AT HIGH SUBSONIC SPEEDS NEAR MIDSPAN OF A TAPERED 35° SWEPTBACK WING WITH A FLAP-TYPE CONTROL AND AN ATTACHED TAB. Alexander D. Hammond and Barbara M. Keffer. March 1954. 57p. diagrs., 35 tabs. (NACA RM L54A22)

HINGE-MOMENT, LIFT, AND PITCHING-MOMENT CHARACTERISTICS OF A FLAP-TYPE CONTROL SURFACE HAVING VARIOUS HINGE-LINE LOCATIONS ON A 4-PERCENT-THICK 60° DELTA WING. TRANSONIC-BUMP METHOD. Robert F. Thompson. March 1954. 73p. diagrs., photo. (NACA RM L54B08)

EFFECTS OF OPERATING PROPELLERS ON THE WING-SURFACE PRESSURES OF A FOUR-ENGINE TRACTOR AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK. Carl D. Kolbe and Frederick W. Boltz. April 1954. 133p. diagrs., photo., 19 tabs. (NACA RM A53L29)

THE TRANSONIC AERODYNAMIC CHARACTERISTICS OF STRUCTURALLY RELATED WINGS OF LOW ASPECT RATIO HAVING A SPANWISE VARIATION IN THICKNESS RATIO - TRANSONIC BUMP TECHNIQUE. Joseph W. Cleary. April 1954. 28p. diagrs., photo. (NACA RM A54B18)

FLIGHT INVESTIGATION OF THE EFFECTS OF A PARTIAL-SPAN LEADING-EDGE CHORD EXTENSION OF THE AERODYNAMIC CHARACTERISTICS OF A 35° SWEPT-WING FIGHTER AIRPLANE. Frederick H. Matteson and Rudolph D. Van Dyke, Jr. April 1954. 34p. diagrs., photos., tabs. (NACA RM A54B26)

(1) AERODYNAMICS

EFFECTS OF SWEEP AND THICKNESS ON THE STATIC LONGITUDINAL AERODYNAMIC CHARACTERISTICS OF A SERIES OF THIN, LOW-ASPECT-RATIO, HIGHLY TAPERED WINGS AT TRANSONIC SPEEDS. TRANSONIC-BUMP METHOD. Albert G. Few, Jr., and Paul G. Fournier. April 1954. 107p. diagrs., photo., tab. (NACA RM L54B25)

THE EFFECT OF BLUNT-TRAILING-EDGE MODIFICATIONS ON THE HIGH-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A SWEPT-WING FIGHTER AIRPLANE. Melvin Sadoff, Frederick H. Matteson, and Rudolph D. Van Dyke, Jr. May 1954. 55p. diagrs., photos., tab. (NACA RM A54C31)

FLIGHT DETERMINATION OF THE BUFFETING CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 58.7° SWEEPBACK. Donald W. Briggs. May 1954. 31p. diagrs., photo., tabs. (NACA RM L54C17)

EFFECT AT TRANSONIC SPEEDS OF INBOARD SPOILERS ON THE STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A 45° SWEPTBACK WING-BODY COMBINATION HAVING A LEADING-EDGE CHORD-EXTENSION. James H. Henderson. June 1954. 24p. diagrs., photo. (NACA RM L54D13)

COMPARISON BETWEEN THEORETICAL AND EXPERIMENTAL RATES OF ROLL OF TWO MODELS WITH FLEXIBLE RECTANGULAR WINGS AT SUPERSONIC SPEEDS. John M. Hedgepeth and Robert J. Kell. August 1954. 21p. diagrs., photo., tabs. (NACA RM L54F23)

STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A COMPOSITE-PLAN-FORM WING MODEL INCLUDING SOME COMPARISONS WITH A 45° SWEPTBACK WING AT TRANSONIC SPEEDS. Walter D. Wolhart. August 1954. 36p. diagrs., photo., tabs. (NACA RM L54F24)

SOME EFFECTS OF EXTERNAL WING TIP STORES ON THE ROLLING EFFECTIVENESS AND DRAG OF PLAIN AND HALF-DELTA TIP AILERONS ON A 4-PERCENT-THICK, TAPERED, UNSWEPT WING. Roland D. English. August 1954. 14p. diagrs., photos., tab. (NACA RM L54F29a)

MEASUREMENT AND ANALYSIS OF WING AND TAIL BUFFETING LOADS ON A FIGHTER AIRPLANE. Wilber B. Huston and T. H. Skopinski. 1955. i, 27p. diagrs., photo., tabs. (NACA Rept. 1219. Supersedes TN 3080)

A METHOD FOR THE DESIGN OF SWEPTBACK WINGS WARPED TO PRODUCE SPECIFIED FLIGHT CHARACTERISTICS AT SUPERSONIC SPEEDS. Warren A. Tucker. 1955. i, 17p. diagrs., tabs. (NACA Rept. 1226. Supersedes RM L51F08)

AN INVESTIGATION OF THE MAXIMUM LIFT OF WINGS AT SUPERSONIC SPEEDS. James J. Gallagher and James N. Mueller. 1955. ii, 28p. diagrs., photos., tabs. (NACA Rept. 1227. Supersedes RM L7J10)

A FLIGHT EVALUATION OF THE LONGITUDINAL STABILITY CHARACTERISTICS ASSOCIATED WITH THE PITCH-UP OF A SWEPT-WING AIRPLANE IN MANEUVERING FLIGHT AT TRANSONIC SPEEDS. Seth B. Anderson and Richard S. Bray. 1955. ii, 12p. diagrs., photo., tab. (NACA Rept. 1237. Supersedes RM A51I12)

INVESTIGATIONS AT SUPERSONIC SPEEDS OF 22 TRIANGULAR WINGS REPRESENTING TWO AIRFOIL SECTIONS FOR EACH OF 11 APEX ANGLES. Eugene S. Love. 1955. ii, 60p. diagrs., photos., tabs. (NACA Rept. 1238. Supersedes RM L9D07)

A CORRELATION BY MEANS OF TRANSONIC SIMILARITY RULES OF EXPERIMENTALLY DETERMINED CHARACTERISTICS OF A SERIES OF SYMMETRICAL AND CAMBERED WINGS OF RECTANGULAR PLAN FORM. John B. McDevitt. 1955. ii, 23p. diagrs., tabs. (NACA Rept. 1253. Supersedes RM A51L17b; RM A53G31)

A COMPARISON OF TWO METHODS FOR COMPUTING THE WAVE DRAG OF WING-BODY COMBINATIONS. Alberta Alksne. April 1955. 32p. diagrs. (NACA RM A55A06a)

WING-LOAD MEASUREMENTS OF THE BELL X-5 RESEARCH AIRPLANE AT A SWEEP ANGLE OF 58.7°. Richard D. Banner, Robert D. Reed, and William L. Marcy. April 1955. 22p. diagrs., photo., tab. (NACA RM H55A11)

THE TRANSONIC CHARACTERISTICS OF 22 RECTANGULAR, SYMMETRICAL WING MODELS OF VARYING ASPECT RATIO AND THICKNESS. Warren H. Nelson and John B. McDevitt. June 1955. 109p. diagrs., photos. (NACA TN 3501. Formerly RM A51A12)

THE TRANSONIC CHARACTERISTICS OF 38 CAMBERED RECTANGULAR WINGS OF VARYING ASPECT RATIO AND THICKNESS AS DETERMINED BY THE TRANSONIC-BUMP TECHNIQUE. Warren H. Nelson and Walter J. Krumm. June 1955. 173p. diagrs., photos. (NACA TN 3502. Formerly RM A52D11)

EFFECTS OF SWEEP ON THE MAXIMUM-LIFT CHARACTERISTICS OF FOUR ASPECT-RATIO-4 WINGS AT TRANSONIC SPEEDS. Thomas R. Turner. July 1955. 25p. diagrs. (NACA TN 3468. Formerly RM L50H11)

SUMMARY OF RESULTS OF A WIND-TUNNEL INVESTIGATION OF NINE RELATED HORIZONTAL TAILS. Jules B. Dods, Jr. and Bruce E. Tinling. July 1955. 105p. diagrs., 2 tabs. (NACA TN 3497. Formerly RM A51G31a)

ANALYSIS OF THE HORIZONTAL-TAIL LOADS MEASURED IN FLIGHT ON A MULTIENGINE JET BOMBER. William S. Aiken, Jr. and Bernard Wiener. September 1955. i, 69p. diagrs., photo., 6 tabs. (NACA TN 3479)

MEASUREMENTS OF THE EFFECTS OF FINITE SPAN ON THE PRESSURE DISTRIBUTION OVER DOUBLE-WEDGE WINGS AT MACH NUMBERS NEAR SHOCK ATTACHMENT. Walter G. Vincenti. September 1955. 50p. diagrs. (NACA TN 3522)

THE EFFECTIVENESS OF WING VORTEX GENERATORS IN IMPROVING THE MANEUVERING CHARACTERISTICS OF A SWEPT-WING AIRPLANE AT TRANSONIC SPEEDS. Norman M. McFadden, George A. Rathert, Jr., and Richard S. Bray. September 1955. 43p. diagrs., photos., tab. (NACA TN 3523. Supersedes RM A51J18)

SUMMARY OF RESULTS OBTAINED BY TRANSONIC-BUMP METHOD ON EFFECTS OF PLAN FORM AND THICKNESS ON LIFT AND DRAG CHARACTERISTICS OF WINGS AT TRANSONIC SPEEDS. Edward C. Polhamus. November 1955. 33p. diagrs., tab. (NACA TN 3469. Supersedes RM L51H30)

FLIGHT INVESTIGATION AT MACH NUMBERS FROM 0.6 TO 1.7 TO DETERMINE DRAG AND BASE PRESSURES ON A BLUNT-TRAILING-EDGE AIRFOIL AND DRAG OF DIAMOND AND CIRCULAR-ARC AIRFOILS AT ZERO LIFT. John D. Morrow and Ellis Katz. November 1955. 19p. diagrs., photos. (NACA TN 3548. Supersedes RM L50E19a)

MEASUREMENTS OF THE EFFECT OF TRAILING-EDGE THICKNESS ON THE ZERO-LIFT DRAG OF THIN LOW-ASPECT-RATIO WINGS. John D. Morrow. November 1955. 11p. diagrs., photo. (NACA TN 3550. Supersedes RM L50F26)

THE TRANSONIC CHARACTERISTICS OF 36 SYMMETRICAL WINGS OF VARYING TAPER, ASPECT RATIO, AND THICKNESS AS DETERMINED BY THE TRANSONIC-BUMP TECHNIQUE. Warren H. Nelson, Edwin C. Allen, and Walter J. Krumm. December 1955. 131p. diagrs., photo. (NACA TN 3529. Supersedes RM A53I29)

PRELIMINARY STUDY OF SOME FACTORS WHICH AFFECT THE STALL-FLUTTER CHARACTERISTICS OF THIN WINGS. A. Gerald Rainey. March 1956. 33p. diagrs., photo., tab. (NACA TN 3622. Supersedes RM L52D08)

AN ANALYSIS OF ESTIMATED AND EXPERIMENTAL TRANSONIC DOWNWASH CHARACTERISTICS AS AFFECTED BY PLAN FORM AND THICKNESS FOR WING AND WING-FUSELAGE CONFIGURATIONS. Joseph Weil, George S. Campbell and Margaret S. Diederich. April 1956. 92p. diagrs., photos., tabs. (NACA TN 3628. Supersedes RM L52I22)

INVESTIGATION AT HIGH SUBSONIC SPEEDS OF A BODY-CONTOURING METHOD FOR ALLEVIATING THE ADVERSE INTERFERENCE AT THE ROOT OF A SWEPTBACK WING. John B. McDevitt and William M. Haire. April 1956. 38p. diagrs., photos. (NACA TN 3672. Supersedes RM A54A22)

WIND-TUNNEL INVESTIGATION OF THE EFFECT OF CLIPPING THE TIPS OF TRIANGULAR WINGS OF DIFFERENT THICKNESS, CAMBER, AND ASPECT RATIO - TRANSONIC BUMP METHOD Horace F. Emerson. June 1956. 183p. diagrs., photo., tabs. (NACA TN 3671. Supersedes RM A53L03)

FLIGHT TESTS AT SUPERSONIC SPEEDS TO DETERMINE THE EFFECT OF TAPER ON THE ZERO-LIFT DRAG OF SWEPTBACK LOW-ASPECT-RATIO WINGS. Murray Pittel. June 1956. 20p. diagrs., photos. (NACA TN 3697. Supersedes RM L50F30a)

THE FLOW PAST AN UNSWEPT- AND A SWEPT-WING—BODY COMBINATION AND THEIR EQUIVALENT BODIES OF REVOLUTION AT MACH NUMBERS NEAR 1.0. Walter F. Lindsey. June 1956. 18p. diagrs., photos. (NACA TN 3703. Supersedes RM L54A28a)

PRELIMINARY WIND-TUNNEL TESTS OF TRIANGULAR AND RECTANGULAR WINGS IN STEADY ROLL AT MACH NUMBERS OF 1.62 AND 1.92. Clinton E. Brown and Harry S. Heinke, Jr. June 1956. 36p. diagrs., tabs. (NACA TN 3740. Supersedes RM L8L30)

(1. 2. 2. 7) WAKE

LONGITUDINAL STABILITY CHARACTERISTICS OF A 42° SWEPTBACK WING AND TAIL COMBINATION AT A REYNOLDS NUMBER OF 6.8×10^6. Stanley H. Spooner and Albert P. Martina. July 22, 1948. 44p. diagrs., photos., 2 tabs. (NACA RM L8E12)

EFFECTS OF HIGH-LIFT AND STALL-CONTROL DEVICES, FUSELAGE, AND HORIZONTAL TAIL ON A WING SWEPT BACK 42° AT THE LEADING EDGE AND HAVING SYMMETRICAL CIRCULAR-ARC AIRFOIL SECTIONS AT A REYNOLDS NUMBER OF 6.9×10^6. Robert L. Woods and Stanley H. Spooner. April 20, 1949. 42p. diagrs., photos., tabs. (NACA RM L9B11)

A STUDY OF SEVERAL FACTORS AFFECTING THE STABILITY CONTRIBUTED BY A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS ON A SWEPTBACK-WING AIRPLANE MODEL. Gerald V. Foster and Roland F. Griner. October 28, 1949. 28p. diagrs., tab. (NACA RM L9H19)

INVESTIGATION OF DOWNWASH AND WAKE CHARACTERISTICS AT A MACH NUMBER OF 1.53. III - SWEPT WINGS. Edward W. Perkins and Thomas N. Canning. February 23, 1950. 41p. diagrs., tab. (NACA RM A9K02)

A TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. WING-FUSELAGE CONFIGURATION WITH A WING OF 45° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Robert S. Osborne. October 10, 1950. 49p. diagrs., photos. (NACA RM L50H08)

(1) AERODYNAMICS

A TRANSONIC WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. WING-FUSELAGE CONFIGURATION HAVING A WING OF 35° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Beverly Z. Henry, Jr. November 15, 1950. 40p. diagrs., photo., tab. (NACA RM L50J09)

HOPIZONTAL-TAIL EFFECTIVENESS AND DOWNWASH SURVEYS FOR TWO 47.7° SWEPTBACK WING-FUSELAGE COMBINATIONS WITH ASPECT RATIOS OF 5.1 AND 6.0 AT A REYNOLDS NUMBER OF 6.0 x 10^6. Reino J. Salmi. January 12, 1951. 65p. diagrs., photos., 2 tabs. (NACA RM L50K06)

A TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. WING-FUSELAGE CONFIGURATION HAVING A WING OF 60° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Raymond B. Wood and Frank F. Fleming. January 24, 1951. 43p. diagrs., photo. (NACA RM L50J25)

AERODYNAMIC CHARACTERISTICS INCLUDING PRESSURE DISTRIBUTIONS OF A FUSELAGE AND THREE COMBINATIONS OF THE FUSELAGE WITH SWEPT-BACK WINGS AT HIGH SUBSONIC SPEEDS. Fred B. Sutton and Andrew Martin. February 6, 1951. 117p. diagrs., photos., tabs. (NACA RM A50J26a)

LOW-SPEED LONGITUDINAL AND WAKE AIRFLOW CHARACTERISTICS AT A REYNOLDS NUMBER OF 6.0 x 10^6 OF A 52° SWEPTBACK WING EQUIPPED WITH VARIOUS SPANS OF LEADING-EDGE AND TRAILING-EDGE FLAPS, A FUSELAGE, AND A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS. Roland F. Griner and Gerald V. Foster. February 28, 1951. 66p. diagrs., photo., 3 tabs. (NACA RM L50K29)

A TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. WING-FUSELAGE CONFIGURATION HAVING A WING OF 0° SWEEPBACK, ASPECT RATIO 4.0, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Maurice S. Cahn and Carroll R. Bryan. March 6, 1951. 37p. diagrs., photos. (NACA RM L51A02)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 2 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL- LONGITUDINAL CHARACTERISTICS. David Graham and David G. Koenig. April 23, 1951. 35p. diagrs., photo., 3 tabs. (NACA RM A51B21)

AERODYNAMIC CHARACTERISTICS OF FOUR WINGS OF SWEEPBACK ANGLES 0°, 35°, 45°, AND 60°, NACA 65A006 AIRFOIL SECTION, ASPECT RATIO 4, AND TAPER RATIO 0.6 IN COMBINATION WITH A FUSELAGE AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. Arvo A. Luoma. June 6, 1951. 59p. diagrs., photo., tab. (NACA RM L51D13)

LOW-SPEED LONGITUDINAL AND WAKE AIRFLOW CHARACTERISTICS AT A REYNOLDS NUMBER OF 5.5 x 10^6 OF A CIRCULAR-ARC 52° SWEPTBACK WING WITH A FUSELAGE AND A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS. Gerald V. Foster and Roland F. Griner. June 19, 1951. 44p. diagrs., tabs. (NACA RM L51C30)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 4 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LONGITUDINAL CHARACTERISTICS. David Graham and David G. Koenig. October 1951. 27p. diagrs., photo., 4 tabs. (NACA RM A51H10a)

DOWNWASH AND SIDEWASH FIELDS BEHIND CRUCIFORM WINGS. John R. Spreiter. January 1952. 18p. photos., diagrs. (NACA RM A51L17)

INVESTIGATION OF THE LOW-SPEED AERODYNAMIC CHARACTERISTICS OF A VARIABLE-SWEEP AIRPLANE MODEL WITH A WING HAVING PARTIAL-SPAN CAMBERED-LEADING-EDGE MODIFICATIONS. Robert E. Becht and Andrew L. Byrnes, Jr. September 1952. 47p. diagrs., photos. (NACA RM L52G08a)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 3 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LONGITUDINAL AND LATERAL CHARACTERISTICS. David G. Koenig. April 1953. 61p. diagrs., photos., 4 tabs. (NACA RM A52L15)

INVESTIGATION OF THE EFFECTS OF WING AND TAIL MODIFICATIONS ON THE LOW-SPEED STABILITY CHARACTERISTICS OF A MODEL HAVING A THIN 40° SWEPT WING OF ASPECT RATIO 3.5. Joseph Weil, William C. Sleeman, Jr., and Andrew L. Byrnes, Jr. April 1953. 95p. diagrs., photos., tab. (NACA RM L53C09)

LONGITUDINAL STABILITY AND WAKE-FLOW CHARACTERISTICS OF A TWISTED AND CAMBERED WING-FUSELAGE COMBINATION OF 45° SWEEPBACK AND ASPECT RATIO 8 WITH A HORIZONTAL TAIL AND STALL-CONTROL DEVICES AT A REYNOLDS NUMBER OF 4.0 x 10^6. Gerald V. Foster. June 1953. 51p. diagrs., photos., tab. (NACA RM L53D08)

DOWNWASH BEHIND A TRIANGULAR WING OF ASPECT RATIO 3 - TRANSONIC BUMP METHOD. John A. Axelson. December 1953. 37p. diagrs., photo., tab. (NACA RM A53I23)

THE NORMAL COMPONENT OF THE INDUCED VELOCITY IN THE VICINITY OF A LIFTING ROTOR AND SOME EXAMPLES OF ITS APPLICATION. Walter Castles, Jr. and Jacob Henri De Leeuw, Georgia Institute of Technology. 1954. ii, 15p. diagrs., 3 tabs. (NACA Rept. 1184. Formerly TN 2912)

AN ANALYTICAL STUDY OF THE EFFECT OF AIRPLANE WAKE ON THE LATERAL DISPERSION OF AERIAL SPRAYS. Wilmer H. Reed, III. 1954. ii, 16p. diagrs., 3 tabs. (NACA Rept. 1196. Formerly TN 3032)

THE EFFECTS OF HORIZONTAL-TAIL HEIGHT AND A PARTIAL-SPAN LEADING-EDGE EXTENSION ON THE STATIC LONGITUDINAL STABILITY OF A WING-FUSELAGE-TAIL COMBINATION HAVING A SWEPTBACK WING. Angelo Bandettini and Ralph Selan. March 1954. 54p. diagrs., photos., 2 tabs. (NACA RM A53J07)

EFFECT OF GROUND INTERFERENCE ON THE AERODYNAMIC AND FLOW CHARACTERISTICS OF A 42° SWEPTBACK WING AT REYNOLDS NUMBERS UP TO 6.8 x 10^6. G. Chester Furlong and Thomas V. Bollech. 1955. ii, 60p. diagrs., photos., tab. (NACA Rept. 1218. Combination of RM L8G22; TN 2487)

DOWNWASH SURVEY BEHIND TWO LOW-ASPECT-RATIO VARIABLE-INCIDENCE WINGS IN COMBINATION WITH THREE DIFFERENT SIZE FUSELAGES AT A MACH NUMBER OF 0.25. Edward J. Hopkins and Norman E. Sorensen. March 1955. 54p. diagrs., photos., tab. (NACA RM A55A07)

FLOW STUDIES ON FLAT-PLATE DELTA WINGS AT SUPERSONIC SPEED. William H. Michael, Jr. July 1955. 40p. diagrs., photos. (NACA TN 3472)

VORTEX INTERFERENCE ON SLENDER AIRPLANES. Alvin H. Sacks. November 1955. 19p. diagr. (NACA TN 3525)

FLOW STUDIES ON DROOPED-LEADING-EDGE DELTA WINGS AT SUPERSONIC SPEED. William H. Michael, Jr. January 1956. 29p. diagrs., photos. (NACA TN 3614)

A THEORETICAL STUDY OF THE AERODYNAMICS OF SLENDER CRUCIFORM-WING ARRANGEMENTS AND THEIR WAKES. John R. Spreiter and Alvin H. Sacks. March 1956. i, 67p. diagrs., photos., tabs. (NACA TN 3528)

LINEARIZED LIFTING-SURFACE AND LIFTING-LINE EVALUATIONS OF SIDEWASH BEHIND ROLLING TRIANGULAR WINGS AT SUPERSONIC SPEEDS. Percy J. Bobbitt. March 1956. 63p. diagrs. (NACA TN 3609)

AN ANALYSIS OF ESTIMATED AND EXPERIMENTAL TRANSONIC DOWNWASH CHARACTERISTICS AS AFFECTED BY PLAN FORM AND THICKNESS FOR WING AND WING-FUSELAGE CONFIGURATIONS. Joseph Weil, George S. Campbell and Margaret S. Diederich. April 1956. 92p. diagrs., photos., tabs. (NACA TN 3628. Supersedes RM L52I22)

DETERMINATION OF VORTEX PATHS BY SERIES EXPANSION TECHNIQUE WITH APPLICATION TO CRUCIFORM WINGS. Alberta Y. Alksne. April 1956. 40p. diagrs., photos. (NACA TN 3670)

ANALYSIS AND COMPARISON WITH THEORY OF FLOW-FIELD MEASUREMENTS NEAR A LIFTING ROTOR IN THE LANGLEY FULL-SCALE TUNNEL. Harry H. Heyson. April 1956. 162p. diagrs., photos., tab. (NACA TN 3691)

COMPARISON BETWEEN EXPERIMENTAL AND PREDICTED DOWNWASH AT A MACH NUMBER OF 0.25 BEHIND A WING-BODY COMBINATION HAVING A TRIANGULAR WING OF ASPECT RATIO 2.0. Norman E. Sorensen and Edward J. Hopkins. May 1956. 29p. diagrs., photos. (NACA TN 3720)

(1.2.2.8) BOUNDARY LAYER

SUBSONIC INVESTIGATION OF EFFECTS OF BODY INDENTATION ON ZERO-LIFT DRAG CHARACTERISTICS OF A 45° SWEPTBACK WING-BODY COMBINATION WITH NATURAL AND FIXED BOUNDARY-LAYER TRANSITION THROUGH A RANGE OF REYNOLDS NUMBER FROM 1 x 10^6 TO 8 x 10^6. Gene J. Bingham and Albert L. Braslow. April 1954. 10p. diagrs., photos. (NACA RM L54B18a)

INVESTIGATIONS AT SUPERSONIC SPEEDS OF 22 TRIANGULAR WINGS REPRESENTING TWO AIRFOIL SECTIONS FOR EACH OF 11 APEX ANGLES. Eugene S. Love. 1955. ii, 60p. diagrs., photos., tabs. (NACA Rept. 1238. Supersedes RM L9D07)

(1.2.2.8.1) Characteristics

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF A TWISTED AND CAMBERED WING SWEPT BACK 63° WITH VORTEX GENERATORS AND FENCES. James A. Weiberg and George B. McCullough. March 1952. 45p. diagrs., photos., 3 tabs. (NACA RM A52A17)

(1.2.2.8.2) Control

WIRE CLOTH AS POROUS MATERIAL FOR TRANSPIRATION-COOLED WALLS. E. R. G. Eckert, Martin R. Kinsler, and Reeves P. Cochran. November 1951. 38p. diagrs., photos., tab. (NACA RM E51H23)

EFFECT OF VERTICAL LOCATION OF A HORIZONTAL TAIL ON THE STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A 45° SWEPTBACK-WING - FUSELAGE COMBINATION OF ASPECT RATIO 8 AT A REYNOLDS NUMBER OF 4.0 x 10^6. Reino J. Salmi and William A. Jacques. January 1952. 42p. diagrs., photos. (NACA RM L51J08)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF A TWISTED AND CAMBERED WING SWEPT BACK 63° WITH VORTEX GENERATORS AND FENCES. James A. Weiberg and George B. McCullough March 1952. 45p. diagrs., photos., 3 tabs. (NACA RM A52A17)

(1) AERODYNAMICS

THE USE OF LEADING-EDGE AREA SUCTION TO INCREASE THE MAXIMUM LIFT COEFFICIENT OF A 35° SWEPT-BACK WING. Curt A. Holzhauser and Robert K. Martin. September 1952. 37p. diagrs., photo., 3 tabs. (NACA RM A52G17)

WIND-TUNNEL INVESTIGATION OF STALL CONTROL BY SUCTION THROUGH A POROUS LEADING EDGE ON A 37° SWEPTBACK WING OF ASPECT RATIO 6 AT REYNOLDS NUMBERS FROM 2.50×10^6 to 8.10×10^6. Robert R. Graham and William A. Jacques. March 1953. 67p. diagrs., photo., 2 tabs. (NACA RM L52L05)

FLIGHT INVESTIGATION OF THE EFFECTS OF A PARTIAL-SPAN LEADING-EDGE CHORD EXTENSION OF THE AERODYNAMIC CHARACTERISTICS OF A 35° SWEPT-WING FIGHTER AIRPLANE. Frederick H. Matteson and Rudolph D. Van Dyke, Jr. April 1954. 34p. diagrs., photos., tabs. (NACA RM A54B26)

FLIGHT TESTS OF LEADING-EDGE AREA SUCTION ON A FIGHTER-TYPE AIRPLANE WITH A 35° SWEPTBACK WING. Richard S. Bray and Robert C. Innis. June 1955. 30p. diagrs., photos., tab. (NACA RM A55C07)

ON THE PERMEABILITY OF POROUS MATERIALS. E. Carson Yates, Jr. January 1956. 31p. diagrs. (NACA TN 3596)

EXPERIMENTAL INVESTIGATION OF AIR-FLOW UNIFORMITY AND PRESSURE LEVEL ON WIRE CLOTH FOR TRANSPIRATION-COOLING APPLICATIONS. Patrick L. Donoughe and Roy A. McKinnon. January 1956. 28p. diagrs., photos., tab. (NACA TN 3652. Supersedes RM E52E16)

PERFORATED SHEETS AS A POROUS MATERIAL FOR DISTRIBUTED SUCTION AND INJECTION. Robert E. Dannenberg, Bruno J. Gambucci, and James A. Weiberg. April 1956. 27p. diagrs., photos. (NACA TN 3669)

A WIND-TUNNEL INVESTIGATION OF A 0.4-SCALE MODEL OF AN ASSAULT-TRANSPORT AIRPLANE WITH BOUNDARY-LAYER CONTROL APPLIED. Marvin P. Fink, Bennie W. Cocke, and Stanley Lipson. May 1956. 63p. diagrs., photos. (NACA RM L55G26a)

(1.3)
Bodies

AERODYNAMIC INVESTIGATION OF A PARABOLIC BODY OF REVOLUTION AT MACH NUMBER OF 1.92 AND SOME EFFECTS OF AN ANNULAR JET EXHAUSTING FROM THE BASE. Eugene S. Love. February 8, 1950. 75p. diagrs., photos., tab. (NACA RM L9K09)

LIFT AND PITCHING-MOMENT INTERFERENCE BETWEEN A POINTED CYLINDRICAL BODY AND TRIANGULAR WINGS OF VARIOUS ASPECT RATIOS AT MACH NUMBERS OF 1.50 AND 2.02. Jack N. Nielsen, Elliott D. Katzen, and Kenneth K. Tang. September 12, 1950. 53p. diagrs., photos., tabs. (NACA RM A50F06)

CHARACTERISTICS OF FLOW OVER INCLINED BODIES OF REVOLUTION. H. Julian Allen and Edward W. Perkins. March 5, 1951. 47p. diagrs., photos. (NACA RM A50L07)

PRELIMINARY INVESTIGATION OF EFFECTIVENESS OF BASE BLEED IN REDUCING DRAG OF BLUNT-BASE BODIES IN SUPERSONIC STREAM. Edgar M. Cortright, Jr., and Albert H. Schroeder. March 9, 1951. 23p. diagrs., photos. (NACA RM E51A26)

DRAG INTERFERENCE BETWEEN A POINTED CYLINDRICAL BODY AND TRIANGULAR WINGS OF VARIOUS ASPECT RATIOS AT MACH NUMBERS OF 1.50 AND 2.02. Elliott D. Katzen and George E. Kaattari. May 23, 1951. 45p. diagrs., photos., tabs. (NACA RM A51C27)

AERODYNAMIC CHARACTERISTICS OF THE NACA RM-10 RESEARCH MISSILE IN THE AMES 1- BY 3-FOOT SUPERSONIC WIND TUNNEL NO. 2 - PRESSURE AND FORCE MEASUREMENTS AT MACH NUMBERS OF 1.52 AND 1.98. Edward W. Perkins, Forrest E. Gowen and Leland H. Jorgensen. September 1951. 37p. diagrs. (NACA RM A51G13)

TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. ANALYSIS OF PRESSURE DISTRIBUTION OF WING-FUSELAGE CONFIGURATION HAVING A WING OF 45° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Donald L. Loving and Bruce B. Estabrooks. September 1951. 132p. diagrs., photos. (NACA RM L51F07)

INVESTIGATION OF THE EFFECT OF A NACELLE AT VARIOUS CHORDWISE AND VERTICAL POSITIONS ON THE AERODYNAMIC CHARACTERISTICS AT HIGH SUBSONIC SPEEDS OF A 45° SWEPTBACK WING WITH AND WITHOUT A FUSELAGE. H. Norman Silvers, Thomas J. King, Jr., and Thomas B. Pasteur, Jr. September 1951. 71p. diagrs., photos., 3 tabs. (NACA RM L51H16)

AN ANALYSIS OF THE PRESSURE DISTRIBUTION MEASURED ON A BODY OF REVOLUTION AT TRANSONIC SPEEDS IN THE SLOTTED TEST SECTION OF THE LANGLEY 8-FOOT TRANSONIC TUNNEL. Bruce B. Estabrooks. June 1952. 42p. diagrs. (NACA RM L52D21a)

INVESTIGATIONS AT SUPERSONIC SPEEDS OF THE BASE PRESSURE ON BODIES OF REVOLUTION WITH AND WITHOUT SWEPTBACK STABILIZING FINS. Eugene S. Love and Robert M. O'Donnell. December 1952. 66p. diagrs., photos. (NACA RM L52J21a)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF THE EFFECT OF VARYING THE RATIO OF BODY DIAMETER TO WING SPAN FROM 0.1 TO 0.8 ON THE AERODYNAMIC CHARACTERISTICS IN PITCH OF A 45° SWEPTBACK-WING—BODY COMBINATION. Harold S. Johnson. November 1953. 32p. diagrs., photo., tab. (NACA RM L53J09a)

AERODYNAMIC CHARACTERISTICS OF A CIRCULAR CYLINDER AT MACH NUMBER 6.86 AND ANGLES OF ATTACK UP TO 90°. Jim A. Penland. March 1954. 30p. diagrs., photos. (NACA RM L54A14)

LONGITUDINAL STABILITY AND DRAG CHARACTERISTICS OF A FIN-STABILIZED BODY OF REVOLUTION WITH A FINENESS RATIO OF 12 AS MEASURED BY THE FREE-FALL METHOD. Max C. Kurbjun. June 1954. 19p. diagrs., photos., tab. (NACA RM L54E13)

DRAG MEASUREMENTS ON A 1/6-SCALE, FINLESS, STING-MOUNTED NACA RM-10 MISSILE IN FLIGHT AT MACH NUMBERS FROM 1.1 TO 4.04 SHOWING SOME REYNOLDS NUMBER AND HEATING EFFECTS. Robert O. Piland. October 1954. 20p. diagrs., photos. (NACA RM L54H09)

A UNIFIED TWO-DIMENSIONAL APPROACH TO THE CALCULATION OF THREE-DIMENSIONAL HYPERSONIC FLOWS, WITH APPLICATION TO BODIES OF REVOLUTION. A. J. Eggers, Jr. and Raymond C. Savin. 1955. ii, 27p. diagrs., tab. (NACA Rept. 1249. Supersedes TN 2811)

COMPARISON OF THE EXPERIMENTAL AND THEORETICAL DISTRIBUTIONS OF LIFT ON A SLENDER INCLINED BODY OF REVOLUTION AT $M = 2^1$. Edward W. Perkins and Donald M. Kuehn. May 1956. 39p. diagrs., photos., tabs. (NACA TN 3715. Supersedes RM A53E01)

COMPARISON OF EXPERIMENTAL AND THEORETICAL NORMAL-FORCE DISTRIBUTIONS (INCLUDING REYNOLDS NUMBER EFFECTS) ON AN OGIVE-CYLINDER BODY AT MACH NUMBER 1.98. Edward W. Perkins and Leland H. Jorgensen. May 1956. 50p. diagrs., tab. (NACA TN 3716. Supersedes RM A54H23)

(1.3.1)
THEORY

AERODYNAMIC CHARACTERISTICS OF NACA RM-10 MISSILE IN 8- BY 6-FOOT SUPERSONIC WIND TUNNEL AT MACH NUMBERS FROM 1.49 TO 1.98. II - PRESENTATION AND ANALYSIS OF FORCE MEASUREMENTS. Fred T. Esenwein, Leonard J. Obery, and Carl F. Schueller. July 21, 1950. 34p. diagrs., photo. (NACA RM E50D28)

PRESSURE MEASUREMENTS ON A SHARPLY CONVERGING FUSELAGE AFTERBODY WITH JET ON AND OFF AT MACH NUMBERS FROM 0.8 TO 1.6. William E. Stoney, Jr., and Ellis Katz. August 10, 1950. 18p. diagrs., photos. (NACA RM L50F06)

AERODYNAMIC CHARACTERISTICS OF NACA RM-10 MISSILE IN 8- BY 6-FOOT SUPERSONIC WIND TUNNEL AT MACH NUMBERS FROM 1.49 TO 1.98. III - ANALYSIS OF FORCE DISTRIBUTION AT ANGLE OF ATTACK (STABILIZING FINS REMOVED). Roger W. Luidens and Paul C. Simon. December 12, 1950. 26p. diagrs. (NACA RM E50I19)

FLOW SEPARATION AHEAD OF A BLUNT AXIALLY SYMMETRIC BODY AT MACH NUMBERS 1.76 TO 2.10. W. E. Moeckel. December 1951. 12p. diagrs., photos. (NACA RM E51I25)

PRESSURE DISTRIBUTIONS AT MACH NUMBERS FROM 0.6 TO 1.9 MEASURED IN FREE FLIGHT ON A PARABOLIC BODY OF REVOLUTION WITH SHARPLY CONVERGENT AFTERBODY. William E. Stoney, Jr. April 1952. 34p. diagrs., photos. (NACA RM L51L03)

EFFECTS OF STABILIZING FINS AND A REAR-SUPPORT STING ON THE BASE PRESSURES OF A BODY OF REVOLUTION IN FREE FLIGHT AT MACH NUMBERS FROM 0.7 TO 1.3. Roger G. Hart. September 1952. 19p. diagrs., photos., tab. (NACA RM L52E06)

COMPARISON OF MEASURED AND PREDICTED INDICATED ANGLES OF ATTACK NEAR THE FUSELAGES OF A TRIANGULAR-WING WIND-TUNNEL MODEL AND A SWEPT-WING FIGHTER AIRPLANE IN FLIGHT. Norman M. McFadden, John L. McCloud, III, and Harry A. James. March 1953. 13p. diagrs. (NACA RM A53A15)

THE BASE PRESSURE AT SUPERSONIC SPEEDS ON TWO-DIMENSIONAL AIRFOILS AND BODIES OF REVOLUTION (WITH AND WITHOUT FINS) HAVING TURBULENT BOUNDARY LAYERS. Eugene S. Love. April 1953. 65p. diagrs., photos.' (NACA RM L53C02)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF THE EFFECT OF VARYING THE RATIO OF BODY DIAMETER TO WING SPAN FROM 0.1 TO 0.8 ON THE AERODYNAMIC CHARACTERISTICS IN PITCH OF A 45° SWEPTBACK-WING—BODY COMBINATION. Harold S. Johnson. November 1953. 32p. diagrs., photo., tab. (NACA RM L53J09a)

A STUDY OF HYPERSONIC SMALL-DISTURBANCE THEORY. Milton D. Van Dyke. 1954. ii, 21p. diagrs. (NACA Rept. 1194. Formerly TN 3173)

LONGITUDINAL STABILITY AND DRAG CHARACTERISTICS OF A FIN-STABILIZED BODY OF REVOLUTION WITH A FINENESS RATIO OF 12 AS MEASURED BY THE FREE-FALL METHOD. Max C. Kurbjun. June 1954. 19p. diagrs., photos., tab. (NACA RM L54E13)

DRAG MEASUREMENTS ON A 1/6-SCALE, FINLESS, STING-MOUNTED NACA RM-10 MISSILE IN FLIGHT AT MACH NUMBERS FROM 1.1 TO 4.04 SHOWING SOME REYNOLDS NUMBER AND HEATING EFFECTS. Robert O. Piland. October 1954. 20p. diagrs., photos. (NACA RM L54H09)

AN INVESTIGATION OF THE CHARACTERISTICS OF THE NACA RM-10 (WITH AND WITHOUT FINS) IN THE LANGLEY 11-INCH HYPERSONIC TUNNEL AT A MACH NUMBER OF 6.9. William D. McCauley and William V. Feller. November 1954. 37p. diagrs., photos. (NACA RM L54I03)

MINIMUM-DRAG DUCTED AND POINTED BODIES OF REVOLUTION BASED ON LINEARIZED SUPERSONIC THEORY. Hermon M. Parker. 1955. ii, 9p. diagrs. (NACA Rept. 1213. Supersedes TN 3189)

ARRANGEMENT OF FUSIFORM BODIES TO REDUCE THE WAVE DRAG AT SUPERSONIC SPEEDS. Morris D. Friedman and Doris Cohen. 1955. ii, 8p. diagrs. (NACA Rept. 1236. Supersedes RM A51I20; TN 3345)

ON BOATTAIL BODIES OF REVOLUTION HAVING MINIMUM WAVE DRAG. Keith C. Harder and Conrad Rennemann, Jr. August 1955. 28p. diagrs., tab. (NACA TN 3478)

AN APPROXIMATE SOLUTION FOR AXIALLY SYMMETRIC FLOW OVER A CONE WITH AN ATTACHED SHOCK WAVE. Richard A. Hord. October 1955. 32p. diagrs. (NACA TN 3485)

A SECOND-ORDER SHOCK-EXPANSION METHOD APPLICABLE TO BODIES OF REVOLUTION NEAR ZERO LIFT. Clarence A. Syvertson and David H. Dennis. January 1956. 57p. diagrs., tabs. (NACA TN 3527)

ERROR IN AIRSPEED MEASUREMENT DUE TO THE STATIC-PRESSURE FIELD AHEAD OF AN AIRPLANE AT TRANSONIC SPEEDS. Thomas C. O'Bryan, Edward C. B. Danforth, and J. Ford Johnston. February 1956. 13p. diagrs., photos. (NACA Rept. 1239. Supersedes RM L9C25; RM L50L28; RM L52A17)

LAMINAR FLOW ABOUT A ROTATING BODY OF REVOLUTION IN AN AXIAL AIRSTREAM. (Die laminare Strömung um einen axial angeströmten rotierreden Drehkörper). H. Schlichting. (Abstract of paper presented at the Eighth International Mechanics Congress, Istanbul, August 27, 1952). February 1956. 43p. diagrs., photo. (NACA TM 1415. Trans. from Ingenieur-Archiv, v. 21, no. 4, 1953, p. 227-244)

BODIES OF REVOLUTION HAVING MINIMUM DRAG AT HIGH SUPERSONIC AIRSPEEDS. A. J. Eggers, Jr., Meyer M. Resnikoff, and David H. Dennis. February 1956. 38p. diagrs., photos. (NACA TN 3666. Supersedes RM A51K27; A52D24)

FLOW OF GAS THROUGH TURBINE LATTICES. M. E. Deich. May 1956. 136p. diagrs., photos. (NACA TM 1393. Trans. of Russian book: Technical Gasdynamics, ch. 7, 1953, p. 312-420)

COMPARISON OF EXPERIMENTAL AND THEORETICAL NORMAL-FORCE DISTRIBUTIONS (INCLUDING REYNOLDS NUMBER EFFECTS) ON AN OGIVE-CYLINDER BODY AT MACH NUMBER 1.98. Edward W. Perkins and Leland H. Jorgensen. May 1956. 50p. diagrs., tab. (NACA TN 3716. Supersedes RM A54H23)

THEORETICAL WAVE DRAG OF SHROUDED AIRFOILS AND BODIES. Paul F. Byrd. June 1956. 40p. diagrs. (NACA TN 3718)

(1.3.2)
SHAPE VARIABLES

FLIGHT INVESTIGATIONS AT HIGH-SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS TO DETERMINE ZERO-LIFT DRAG OF FIN-STABILIZED BODIES OF REVOLUTION HAVING FINENESS RATIOS OF 12.5, 8.91, AND 6.04 AND VARYING POSITIONS OF MAXIMUM DIAMETER. Roger G. Hart and Ellis R. Katz. November 30, 1949. 36p. diagrs., photos. (NACA RM L9I30)

AERODYNAMIC CHARACTERISTICS OF FOUR BODIES OF REVOLUTION SHOWING SOME EFFECTS OF AFTERBODY SHAPE AND FINENESS RATIO AT FREE-STREAM MACH NUMBERS FROM 1.50 TO 1.99. Robert J. Cohen. May 22, 1951. 31p. diagrs., tabs. (NACA RM E51C06)

INVESTIGATIONS AT SUPERSONIC SPEEDS OF THE BASE PRESSURE ON BODIES OF REVOLUTION WITH AND WITHOUT SWEPTBACK STABILIZING FINS. Eugene S. Love and Robert M. O'Donnell. December 1952. 66p. diagrs., photos. (NACA RM L52J21a)

PRESSURE DISTRIBUTION AND PRESSURE DRAG FOR A HEMISPHERICAL NOSE AT MACH NUMBERS 2.05, 2.54, AND 3.04. Leo T. Chauvin. December 1952. 14p. diagrs., photos. (NACA RM L52K06)

THE BASE PRESSURE AT SUPERSONIC SPEEDS ON TWO-DIMENSIONAL AIRFOILS AND BODIES OF REVOLUTION (WITH AND WITHOUT FINS) HAVING TURBULENT BOUNDARY LAYERS. Eugene S. Love. April 1953. 65p. diagrs., photos. (NACA RM L53C02)

AN EXPERIMENTAL AND THEORETICAL INVESTIGATION AT HIGH SUBSONIC SPEEDS OF THE EFFECTS OF HORIZONTAL-TAIL HEIGHT ON THE AERODYNAMIC CHARACTERISTICS IN SIDESLIP OF AN UNSWEPT, UNTAPERED TAIL ASSEMBLY. Harleth G. Wiley and Donald R. Riley. December 1953. 71p. diagrs., tab. (NACA RM L53J19)

SUBSONIC INVESTIGATION OF EFFECTS OF BODY INDENTATION ON ZERO-LIFT DRAG CHARACTERISTICS OF A 45° SWEPTBACK WING-BODY COMBINATION WITH NATURAL AND FIXED BOUNDARY-LAYER TRANSITION THROUGH A RANGE OF REYNOLDS NUMBER FROM 1×10^6 TO 8×10^6. Gene J. Bingham and Albert L. Braslow. April 1954. 10p. diagrs., photos. (NACA RM L54B18a)

MINIMUM-DRAG DUCTED AND POINTED BODIES OF REVOLUTION BASED ON LINEARIZED SUPERSONIC THEORY. Hermon M. Parker. 1955. ii, 9p. diagrs. (NACA Rept. 1213. Supersedes TN 3189)

APPLICATION OF WING-BODY THEORY TO DRAG REDUCTION AT LOW SUPERSONIC SPEEDS. Barrett S. Baldwin, Jr., and Robert R. Dickey. January 1955. 42p. (NACA RM A54J19)

ON BOATTAIL BODIES OF REVOLUTION HAVING MINIMUM WAVE DRAG. Keith C. Harder and Conrad Rennemann, Jr. August 1955. 28p. diagrs., tab. (NACA TN 3478)

FLIGHT INVESTIGATION AT MACH NUMBERS FROM 0.8 TO 1.5 TO DETERMINE THE EFFECTS OF NOSE BLUNTNESS ON THE TOTAL DRAG OF TWO FIN-STABILIZED BODIES OF REVOLUTION. Roger G. Hart. December 1955. 11p. diagrs., photos., tabs. (NACA TN 3549. Supersedes RM L50I08a)

WING-BODY COMBINATIONS WITH CERTAIN GEOMETRIC RESTRAINTS HAVING LOW ZERO-LIFT WAVE DRAG AT LOW SUPERSONIC MACH NUMBERS. Harvard Lomax. February 1956. 32p. diagrs. (NACA TN 3667)

INVESTIGATION AT HIGH SUBSONIC SPEEDS OF A BODY-CONTOURING METHOD FOR ALLEVIATING THE ADVERSE INTERFERENCE AT THE ROOT OF A SWEPTBACK WING. John B. McDevitt and William M. Haire. April 1956. 38p. diagrs., photos. (NACA TN 3672. Supersedes RM A54A22)

INVESTIGATION AT SUPERSONIC SPEEDS OF THE VARIATION WITH REYNOLDS NUMBER AND MACH NUMBER OF THE TOTAL, BASE, AND SKIN-FRICTION DRAG OF SEVEN BOATTAIL BODIES OF REVOLUTION DESIGNED FOR MINIMUM WAVE DRAG. August F. Bromm, Jr. and Julia M. Goodwin. June 1956. 20p. diagrs., photo. (NACA TN 3708. Supersedes RM L53I29b)

(1.3.2.1) FINENESS RATIO

INVESTIGATION OF THE EFFECTS OF GEOMETRIC CHANGES IN AN UNDERWING PYLON-SUSPENDED EXTERNAL-STORE INSTALLATION ON THE AERODYNAMIC CHARACTERISTICS OF A 45° SWEPTBACK WING AT HIGH SUBSONIC SPEEDS. Kenneth P. Spreemann and William J. Alford, Jr. March 5, 1951. 91p. diagrs., photos., tabs. (NACA RM L50L12)

AERODYNAMIC CHARACTERISTICS OF FOUR BODIES OF REVOLUTION SHOWING SOME EFFECTS OF AFTERBODY SHAPE AND FINENESS RATIO AT FREE-STREAM MACH NUMBERS FROM 1.50 TO 1.99. Robert J. Cohen. May 22, 1951. 31p. diagrs., tabs. (NACA RM E51C06)

PRESSURE MEASUREMENTS ON A BODY OF REVOLUTION IN THE LANGLEY 16-FOOT TRANSONIC TUNNEL AND A COMPARISON WITH FREE-FALL DATA. Joseph M. Hallissy, Jr. March 1952. 19p. diagrs. (NACA RM L51L07a)

INVESTIGATIONS AT SUPERSONIC SPEEDS OF THE BASE PRESSURE ON BODIES OF REVOLUTION WITH AND WITHOUT SWEPTBACK STABILIZING FINS. Eugene S. Love and Robert M. O'Donnell. December 1952. 66p. diagrs., photos. (NACA RM L52J21a)

INVESTIGATION OF REYNOLDS NUMBER EFFECTS FOR A SERIES OF CONE-CYLINDER BODIES AT MACH NUMBERS OF 1.62, 1.93, AND 2.41. Carl E. Grigsby and Edmund L. Ogburn. October 1953. 20p. diagrs., photos. (NACA RM L53H21)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF THE EFFECT OF VARYING THE RATIO OF BODY DIAMETER TO WING SPAN FROM 0.1 TO 0.8 ON THE AERODYNAMIC CHARACTERISTICS IN PITCH OF A 45° SWEPTBACK-WING—BODY COMBINATION. Harold S. Johnson. November 1953. 32p. diagrs., photo., tab. (NACA RM L53J09a)

EFFECTS OF WING POSITION AND FUSELAGE SIZE ON THE LOW-SPEED STATIC AND ROLLING STABILITY CHARACTERISTICS OF A DELTA-WING MODEL. Alex Goodman and David F. Thomas, Jr. 1955. ii, 31p. diagrs., photos., tabs. (NACA Rept. 1224. Supersedes TN 3063)

A SECOND-ORDER SHOCK-EXPANSION METHOD APPLICABLE TO BODIES OF REVOLUTION NEAR ZERO LIFT. Clarence A. Syvertson and David H. Dennis. January 1956. 57p. diagrs., tabs. (NACA TN 3527)

ERROR IN AIRSPEED MEASUREMENT DUE TO THE STATIC-PRESSURE FIELD AHEAD OF AN AIRPLANE AT TRANSONIC SPEEDS. Thomas C. O'Bryan, Edward C. B. Danforth, and J. Ford Johnston. February 1956. 13p. diagrs., photos. (NACA Rept. 1239. Supersedes RM L9C25; RM L50L28; RM L52A17)

(1.3.2.2) CROSS SECTION

EFFECT OF A PILOT'S CANOPY ON THE DRAG OF AN NACA RM-2 DRAG RESEARCH MODEL IN FLIGHT AT TRANSONIC AND SUPERSONIC SPEEDS. Paul E. Purser. April 20, 1948. 7p. diagrs., photos. (NACA RM L7L22)

FLIGHT INVESTIGATION AT MACH NUMBERS FROM 0.8 TO 1.5 OF THE DRAG OF A CANOPY LOCATED AT TWO POSITIONS ON A PARABOLIC BODY OF REVOLUTION. Clement J. Welsh and John D. Morrow. March 15, 1951. 15p. diagrs., photos., tabs. (NACA RM L51A29)

THE EFFECT ON ZERO-LIFT DRAG OF AN INDENTED FUSELAGE OR A THICKENED WING-ROOT MODIFICATION TO A 45° SWEPTBACK WING-BODY CONFIGURATION AS DETERMINED BY FLIGHT TESTS AT TRANSONIC SPEEDS. William B. Pepper. September 1951. 20p. diagrs., photos., 2 tabs. (NACA RM L51F15)

SOME EFFECTS OF BODY CROSS-SECTIONAL SHAPE, INCLUDING A SUNKEN-CANOPY DESIGN, ON DRAG AS SHOWN BY ROCKET-POWERED-MODEL TESTS AT MACH NUMBERS FROM 0.8 TO 1.5. William E. Stoney, Jr., and Leonard W. Putland. July 1952. 15p. diagrs., photos. (NACA RM L52D07)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF EFFECT OF SIZE AND POSITION OF CLOSED AIR DUCTS ON STATIC LONGITUDINAL AND STATIC LATERAL STABILITY CHARACTERISTICS OF UNSWEPT-MIDWING MODELS HAVING WINGS OF ASPECT RATIO 2, 4, AND 6. Byron M. Jaquet and James L. Williams. September 1955. 45p. diagrs., photos., tabs. (NACA TN 3481)

EXPERIMENTAL INVESTIGATION AT LOW SPEED OF EFFECTS OF FUSELAGE CROSS SECTION ON STATIC LONGITUDINAL AND LATERAL STABILITY CHARACTERISTICS OF MODELS HAVING 0° AND 45° SWEPTBACK SURFACES. William Letko and James L. Williams. December 1955. 45p. diagrs., tabs. (NACA TN 3551)

WIND-TUNNEL INVESTIGATION OF EFFECTS OF FUSELAGE CROSS-SECTIONAL SHAPE, FUSELAGE BEND, AND VERTICAL-TAIL SIZE ON DIRECTIONAL CHARACTERISTICS OF NONOVERLAP-TYPE HELICOPTER FUSELAGE MODELS WITHOUT ROTORS. James L. Williams. March 1956. 39p. diagrs., photos. (NACA TN 3645)

(1. 3. 2. 3)
THICKNESS DISTRIBUTION

FLIGHT INVESTIGATIONS AT HIGH-SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS TO DETERMINE ZERO-LIFT DRAG OF FIN-STABILIZED BODIES OF REVOLUTION HAVING FINENESS RATIOS OF 12.5, 8.91, AND 6.04 AND VARYING POSITIONS OF MAXIMUM DIAMETER. Roger G. Hart and Ellis R. Katz. November 30, 1949. 36p. diagrs., photos. (NACA RM L9I30)

FLIGHT INVESTIGATION AT MACH NUMBERS FROM 0.8 TO 1.5 TO DETERMINE THE EFFECTS OF NOSE BLUNTNESS ON THE TOTAL DRAG OF TWO FIN-STABILIZED BODIES OF REVOLUTION. Roger G. Hart. December 1955. 11p. diagrs., photos., tabs. (NACA TN 3549. Supersedes RM L50I08a)

(1. 3. 2. 4)
SURFACE CONDITIONS

PRELIMINARY FREE-FLIGHT INVESTIGATION OF THE EFFECTS OF RIVETS AND LAP JOINTS ON THE DRAG OF BODIES AT ZERO LIFT AT SUPERSONIC MACH NUMBERS TO 2.1. Russell N. Hopko. August 1952. 12p. diagrs., photos., tab. (NACA RM L52F09)

INVESTIGATION OF REYNOLDS NUMBER EFFECTS FOR A SERIES OF CONE-CYLINDER BODIES AT MACH NUMBERS OF 1.62, 1.93, AND 2.41. Carl E. Grigsby and Edmund L. Ogburn. October 1953. 20p. diagrs., photos. (NACA RM L53H21)

AN INVESTIGATION OF THE EFFECTS OF HEAT TRANSFER ON BOUNDARY-LAYER TRANSITION ON A PARABOLIC BODY OF REVOLUTION (NACA RM-10) AT A MACH NUMBER OF 1.61. K. R. Czarnecki and Archibald R. Sinclair. 1955. 11p. diagrs., photos., tab. (NACA Rept. 1240. Supersedes TN 3165 and TN 3166)

A STUDY OF BOUNDARY-LAYER TRANSITION AND SURFACE TEMPERATURE DISTRIBUTIONS AT MACH 3.12. Paul F. Brinich. July 1955. 39p. diagrs., photo. (NACA TN 3509)

ACOUSTIC RADIATION FROM TWO-DIMENSIONAL RECTANGULAR CUTOUTS IN AERODYNAMIC SURFACES. K. Krishnamurty, California Institute of Technology. August 1955. 33p. diagrs., photos. (NACA TN 3487)

SOME MEASUREMENTS OF FLOW IN A RECTANGULAR CUTOUT. Anatol Roshko, California Institute of Technology. August 1955. 21p. diagrs. (NACA TN 3488)

FLIGHT INVESTIGATION OF THE SURFACE-PRESSURE DISTRIBUTION AND THE FLOW FIELD AROUND A CONICAL AND TWO SPHERICAL NONROTATING FULL-SCALE PROPELLER SPINNERS. Jerome B. Hammack, Milton L. Windler, and Elwood F. Scheithauer. September 1955. 36p. diagrs., photos. (NACA TN 3535)

EFFECT OF LEADING-EDGE GEOMETRY ON BOUNDARY-LAYER TRANSITION AT MACH 3.1. Paul F. Brinich. March 1956. 44p. diagrs., tabs. (NACA TN 3659)

(1. 3. 2. 5)
PROTUBERANCES

EFFECT OF A PILOT'S CANOPY ON THE DRAG OF AN NACA RM-2 DRAG RESEARCH MODEL IN FLIGHT AT TRANSONIC AND SUPERSONIC SPEEDS. Paul E. Purser. April 20, 1948. 7p. diagrs., photos. (NACA RM L7L22)

EFFECT OF WINDSHIELD SHAPE OF A PILOT'S CANOPY ON THE DRAG OF AN NACA RM-2 DRAG RESEARCH MODEL IN FLIGHT AT TRANSONIC SPEEDS. Sidney R. Alexander. July 21, 1948. 6p. diagrs. (NACA RM L8E04)

FLIGHT INVESTIGATION AT MACH NUMBERS FROM 0.8 TO 1.5 OF THE DRAG OF A CANOPY LOCATED AT TWO POSITIONS ON A PARABOLIC BODY OF REVOLUTION. Clement J. Welsh and John D. Morrow. March 15, 1951. 15p. diagrs., photos., tabs. (NACA RM L51A29)

FLOW SEPARATION AHEAD OF A BLUNT AXIALLY SYMMETRIC BODY AT MACH NUMBERS 1.76 TO 2.10. W. E. Moeckel. December 1951. 12p. diagrs., photos. (NACA RM E51I25)

PRELIMINARY FREE-FLIGHT INVESTIGATION OF THE EFFECTS OF RIVETS AND LAP JOINTS ON THE DRAG OF BODIES AT ZERO LIFT AT SUPERSONIC MACH NUMBERS TO 2.1. Russell N. Hopko. August 1952. 12p. diagrs., photos., tab. (NACA RM L52F09)

A STUDY OF BOUNDARY-LAYER TRANSITION AND SURFACE TEMPERATURE DISTRIBUTIONS AT MACH 3.12. Paul F. Brinich. July 1955. 39p. diagrs., photo. (NACA TN 3509)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF EFFECT OF SIZE AND POSITION OF CLOSED AIR DUCTS ON STATIC LONGITUDINAL AND STATIC LATERAL STABILITY CHARACTERISTICS OF UNSWEPT-MIDWING MODELS HAVING WINGS OF ASPECT RATIO 2, 4, AND 6. Byron M. Jaquet and James L. Williams. September 1955. 45p. diagrs., photos., tabs. (NACA TN 3481)

EFFECT OF PNEUMATIC DE-ICERS AND ICE FORMATIONS ON AERODYNAMIC CHARACTERISTICS OF AN AIRFOIL. Dean T. Bowden. February 1956. 59p. diagrs., photos. (NACA TN 3564)

EFFECT OF LEADING-EDGE GEOMETRY ON BOUNDARY-LAYER TRANSITION AT MACH 3.1. Paul F. Brinich. March 1956. 44p. diagrs., tabs. (NACA TN 3659)

THE FLOW PAST AN UNSWEPT- AND A SWEPT-WING—BODY COMBINATION AND THEIR EQUIVALENT BODIES OF REVOLUTION AT MACH NUMBERS NEAR 1.0. Walter F. Lindsey. June 1956. 18p. diagrs., photos. (NACA TN 3703. Supersedes RM L54A28a)

(1.3.3) CANOPIES

EFFECT OF A PILOT'S CANOPY ON THE DRAG OF AN NACA RM-2 DRAG RESEARCH MODEL IN FLIGHT AT TRANSONIC AND SUPERSONIC SPEEDS. Paul E. Purser. April 20, 1948. 7p. diagrs., photos. (NACA RM L7L22)

EFFECT OF WINDSHIELD SHAPE OF A PILOT'S CANOPY ON THE DRAG OF AN NACA RM-2 DRAG RESEARCH MODEL IN FLIGHT AT TRANSONIC SPEEDS. Sidney R. Alexander. July 21, 1948. 6p. diagrs. (NACA RM L8E04)

FLIGHT INVESTIGATION AT MACH NUMBERS FROM 0.8 TO 1.5 OF THE DRAG OF A CANOPY LOCATED AT TWO POSITIONS ON A PARABOLIC BODY OF REVOLUTION. Clement J. Welsh and John D. Morrow. March 15, 1951. 15p. diagrs., photos., tabs. (NACA RM L51A29)

SOME EFFECTS OF BODY CROSS-SECTIONAL SHAPE, INCLUDING A SUNKEN-CANOPY DESIGN, ON DRAG AS SHOWN BY ROCKET-POWERED-MODEL TESTS AT MACH NUMBERS FROM 0.8 TO 1.5. William E. Stoney, Jr., and Leonard W. Putland. July 1952. 15p. diagrs., photos. (NACA RM L52D07)

(1.3.4) DUCTED BODIES

PRELIMINARY INVESTIGATION OF EFFECTIVENESS OF BASE BLEED IN REDUCING DRAG OF BLUNT-BASE BODIES IN SUPERSONIC STREAM. Edgar M. Cortright, Jr., and Albert H. Schroeder. March 9, 1951. 23p. diagrs., photos. (NACA RM E51A26)

CHARACTERISTICS OF FOUR NOSE INLETS AS MEASURED AT MACH NUMBERS BETWEEN 1.4 AND 2.0. George B. Brajnikoff and Arthur W. Rogers. June 25, 1951. 48p. diagrs., photos. (NACA RM A51C12)

TRANSONIC FLIGHT TESTS TO DETERMINE ZERO-LIFT DRAG AND PRESSURE RECOVERY OF NACELLES LOCATED AT THE WING TIPS ON A 45° SWEPTBACK WING AND BODY COMBINATION. Sherwood Hoffman and William B. Pepper, Jr. January 1952. 21p. diagrs., photos., tabs. (NACA RM L51K02)

FLIGHT DETERMINATION OF DRAG OF NORMAL-SHOCK NOSE INLETS WITH VARIOUS COWLING PROFILES AT MACH NUMBERS FROM 0.9 TO 1.5. R. I. Sears, C. F. Merlet, and L. W. Putland. October 1953. 36p. diagrs., photos., tabs. (NACA RM L53I25a)

DYNAMIC STABILITY AND CONTROL CHARACTERISTICS OF A DUCTED-FAN MODEL IN HOVERING FLIGHT. Robert H. Kirby. April 1954. 16p. diagrs., photos. (NACA RM L54C18)

SOME INTERNAL-FLOW CHARACTERISTICS AT ZERO FLIGHT SPEED OF AN ANNULAR SUPERSONIC INLET AND AN OPEN-NOSE INLET WITH SHARP AND ROUNDED LIPS. Joseph R. Milillo. July 1954. 23p. diagrs., photo. (NACA RM L54E19)

SOME INTERNAL-FLOW CHARACTERISTICS OF SEVERAL AXISYMMETRICAL NACA 1-SERIES NOSE AIR INLETS AT ZERO FLIGHT SPEED. Carroll R. Bryan and Frank F. Fleming. July 1954. 30p. diagrs., photos. (NACA RM L54E19a)

ESTIMATION OF INLET LIP FORCES AT SUBSONIC AND SUPERSONIC SPEEDS. W. E. Moeckel. June 1955. 12p. diagrs. (NACA TN 3457)

FLIGHT DETERMINATION OF THE DRAG AND PRESSURE RECOVERY OF AN NACA 1-40-250 NOSE INLET AT MACH NUMBERS FROM 0.9 TO 1.8. R. I. Sears and C. F. Merlet. July 1955. 30p. diagrs., photos., 2 tabs. (NACA TN 3218. Formerly RM L50L18)

(1.3.4.1) NOSE SHAPE

WIND-TUNNEL INVESTIGATION OF A TAILLESS TRIANGULAR-WING FIGHTER AIRCRAFT AT MACH NUMBERS FROM 0.5 TO 1.5. Leslie F. Lawrence and James L. Summers. June 24, 1949. 56p. diagrs., photos., tab. (NACA RM A9B16)

PRELIMINARY DATA ON THE EFFECT OF BODY-NOSE BLUNTNESS ON THE DRAG AND PRESSURE RECOVERY OF A SIDE-INLET-BODY COMBINATION AT MACH NUMBERS OF 1.4 AND 1.7. John F. Stroud and Warren E. Anderson. April 25, 1951. 13p. diagrs., photos. (NACA RM A51A09)

FLIGHT DETERMINATION OF DRAG OF NORMAL-SHOCK NOSE INLETS WITH VARIOUS COWLING PROFILES AT MACH NUMBERS FROM 0.9 TO 1.5. R. I. Sears, C. F. Merlet, and L. W. Putland. October 1953. 36p. diagrs., photos., tabs. (NACA RM L53I25a)

THEORETICAL AND EXPERIMENTAL ANALYSIS OF LOW-DRAG SUPERSONIC INLETS HAVING A CIRCULAR CROSS SECTION AND A CENTRAL BODY AT MACH NUMBERS OF 3.30, 2.75, AND 2.45. Antonio Ferri and Louis M. Nucci. 1954. ii, 37p. diagrs., photos. (NACA Rept. 1189. Supersedes RM L8H13)

SOME INTERNAL-FLOW CHARACTERISTICS AT ZERO FLIGHT SPEED OF AN ANNULAR SUPERSONIC INLET AND AN OPEN-NOSE INLET WITH SHARP AND ROUNDED LIPS. Joseph R. Milillo. July 1954. 23p. diagrs., photo. (NACA RM L54E19)

MINIMUM-DRAG DUCTED AND POINTED BODIES OF REVOLUTION BASED ON LINEARIZED SUPERSONIC THEORY. Hermon M. Parker. 1955. ii, 9p. diagrs. (NACA Rept. 1213. Supersedes TN 3189)

FLIGHT DETERMINATION OF THE DRAG AND PRESSURE RECOVERY OF AN NACA 1-40-250 NOSE INLET AT MACH NUMBERS FROM 0.9 TO 1.8. R. I. Sears and C. F. Merlet. July 1955. 30p. diagrs., photos., 2 tabs. (NACA TN 3218. Formerly RM L50L18)

(1.3.4.3) SIDE INLETS

EXPERIMENTAL INVESTIGATION AT SUPERSONIC SPEEDS OF TWIN-SCOOP DUCT INLETS OF EQUAL AREA. I. - AN INLET ENCLOSING 61.5 PERCENT OF THE MAXIMUM CIRCUMFERENCE OF THE FOREBODY. Wallace F. Davis and David L. Goldstein. January 21, 1948. 16p. diagrs., photos. (NACA RM A7J27)

EXPERIMENTAL INVESTIGATION AT SUPERSONIC SPEEDS OF TWIN-SCOOP DUCT INLETS OF EQUAL AREA. II - EFFECTS OF SLOTS UPON AN INLET ENCLOSING 61.5 PERCENT OF THE MAXIMUM CIRCUMFERENCE OF THE FOREBODY. Wallace F. Davis and David L. Goldstein. June 9, 1948. 15p. diagrs., photos. (NACA RM A8C11)

EXPERIMENTAL INVESTIGATION AT SUPERSONIC SPEEDS OF TWIN-SCOOP DUCT INLETS OF EQUAL AREA. III - INLET ENCLOSING 37.2 PERCENT OF THE MAXIMUM CIRCUMFERENCE OF THE FOREBODY. Wallace F. Davis and Sherman S. Edwards. July 22, 1948. 25p. diagrs., photos. (NACA RM A8E04)

EXPERIMENTAL INVESTIGATION AT SUPERSONIC SPEEDS OF TWIN-SCOOP DUCT INLETS OF EQUAL AREA. IV - SOME EFFECTS OF INTERNAL DUCT SHAPE UPON AN INLET ENCLOSING 37.2 PERCENT OF THE FOREBODY CIRCUMFERENCE. Wallace F. Davis, Sherman S. Edwards, and George B. Brajnikoff. March 15, 1949. 21p. diagrs., photos. (NACA RM A9A31)

SOME LOW-SPEED CHARACTERISTICS OF AN AIR-INDUCTION SYSTEM HAVING SCOOP-TYPE INLETS WITH PROVISIONS FOR BOUNDARY-LAYER CONTROL. Earl C. Watson. August 1951. 42p. diagrs., photos., tab. (NACA RM A51F15)

EXPERIMENTAL INVESTIGATION OF INTERNAL-FLOW CHARACTERISTICS OF FORWARD UNDERSLUNG FUSELAGE SCOOPS WITH UNSWEPT AND SWEPTBACK ENTRANCE AT MACH NUMBERS OF 1.41 TO 1.96. Robert W. Boswinkle, Jr., and Meade H. Mitchell, Jr. March 1952. 34p. photos., diagrs. (NACA RM L52A24)

PRESSURE AND FORCE CHARACTERISTICS AT TRANSONIC SPEEDS OF A SUBMERGED DIVERGENT-WALLED AIR INLET ON A BODY OF REVOLUTION. John A. Braden and P. Kenneth Pierpont. May 1953. 65p. photos., diagrs., tabs. (NACA RM L53C13)

CHARTS OF BOUNDARY-LAYER MASS FLOW AND MOMENTUM FOR INLET PERFORMANCE ANALYSIS MACH NUMBER RANGE, 0.2 TO 5.0. Paul C. Simon and Kenneth L. Kowalski. November 1955. 32p. diagrs., tab. (NACA TN 3583)

(1.3.4.4) SIDE EXITS

AN INVESTIGATION OF THE DISCHARGE AND DRAG CHARACTERISTICS OF AUXILIARY-AIR OUTLETS DISCHARGING INTO A TRANSONIC STREAM. Paul E. Dewey and Allen R. Vick. July 1955. 38p. diagrs., photos. (NACA TN 3466)

SUMMARY OF SCALE-MODEL THRUST-REVERSER INVESTIGATION. John H. Povolny, Fred W. Steffen, and Jack G. McArdle. February 1956. 49p. diagrs., photos. (NACA TN 3664)

(1.4)
Internal Aerodynamics

PRELIMINARY INVESTIGATION OF EFFECTIVENESS OF BASE BLEED IN REDUCING DRAG OF BLUNT-BASE BODIES IN SUPERSONIC STREAM. Edgar M. Cortright, Jr., and Albert H. Schroeder. March 9, 1951. 23p. diagrs., photos. (NACA RM E51A26)

COMPARISON OF LOCKED-ROTOR AND WINDMILLING DRAG CHARACTERISTICS OF AN AXIAL-FLOW-COMPRESSOR TYPE TURBOJET ENGINE. K. R. Vincent, S. C. Huntley, and H. D. Wilsted. January 1952. 10p. diagrs. (NACA RM E51K15)

EFFECT OF TRANSVERSE BODY FORCE ON CHANNEL FLOW WITH SMALL HEAT ADDITION. Simon Ostrach and Franklin K. Moore. February 1956. 31p. diagrs. (NACA TN 3594)

(1.4.1)
AIR INLETS

TRANSONIC FLIGHT TESTS TO DETERMINE ZERO-LIFT DRAG AND PRESSURE RECOVERY OF NACELLES LOCATED AT THE WING TIPS ON A 45° SWEPTBACK WING AND BODY COMBINATION. Sherwood Hoffman and William B. Pepper, Jr. January 1952. 21p. diagrs., photos., tabs. (NACA RM L51K02)

PERFORMANCE OF AIR INLETS AT TRANSONIC AND LOW SUPERSONIC SPEEDS. Mark R. Nichols and Robert E. Pendley. February 1952. 22p. diagrs. (NACA RM L52A07)

AN ANALYTICAL STUDY OF THE COMPARATIVE PERFORMANCE OF FOUR AIR-INDUCTION SYSTEMS FOR TURBOJET-POWERED AIRPLANES DESIGNED TO OPERATE AT MACH NUMBERS UP TO 1.5. James R. Blackaby. June 1952. 38p. diagrs. (NACA RM A52C14)

FLIGHT DETERMINATION OF DRAG OF NORMAL-SHOCK NOSE INLETS WITH VARIOUS COWLING PROFILES AT MACH NUMBERS FROM 0.9 TO 1.5. R. I. Sears, C. F. Merlet, and L. W. Putland. October 1953. 36p. diagrs., photos., tabs. (NACA RM L53I25a)

THEORETICAL AND EXPERIMENTAL INVESTIGATION OF ADDITIVE DRAG. Merwin Sibulkin. 1954. ii, 12p. diagrs. (NACA Rept. 1187. Formerly RM E51B13)

THEORETICAL PERFORMANCE CHARACTERISTICS OF SHARP-LIP INLETS AT SUBSONIC SPEEDS. Evan A. Fradenburgh and DeMarquis D. Wyatt. 1954. ii, 8p. diagrs. (NACA Rept. 1193. Formerly TN 3004)

SOME INTERNAL-FLOW CHARACTERISTICS AT ZERO FLIGHT SPEED OF AN ANNULAR SUPERSONIC INLET AND AN OPEN-NOSE INLET WITH SHARP AND ROUNDED LIPS. Joseph R. Milillo. July 1954. 23p. diagrs., photo. (NACA RM L54E19)

FLIGHT DETERMINATION OF THE DRAG AND PRESSURE RECOVERY OF AN NACA 1-40-250 NOSE INLET AT MACH NUMBERS FROM 0.9 TO 1.8. R. I. Sears and C. F. Merlet. July 1955. 30p. diagrs., photos., 2 tabs. (NACA TN 3218. Formerly RM L50L18)

ACOUSTIC ANALYSIS OF RAM-JET BUZZ. Harold Mirels. November 1955. 33p diagrs. (NACA TN 3574)

(1.4.1.1)
NOSE, CENTRAL

FLIGHT DETERMINATION OF DRAG OF NORMAL-SHOCK NOSE INLETS WITH VARIOUS COWLING PROFILES AT MACH NUMBERS FROM 0.9 TO 1.5. R. I. Sears, C. F. Merlet, and L. W. Putland. October 1953. 36p. diagrs., photos., tabs. (NACA RM L53I25a)

THEORETICAL AND EXPERIMENTAL ANALYSIS OF LOW-DRAG SUPERSONIC INLETS HAVING A CIRCULAR CROSS SECTION AND A CENTRAL BODY AT MACH NUMBERS OF 3.30, 2.75, AND 2.45. Antonio Ferri and Louis M. Nucci. 1954. ii, 37p. diagrs., photos. (NACA Rept. 1189. Supersedes RM L8H13)

SOME INTERNAL-FLOW CHARACTERISTICS OF SEVERAL AXISYMMETRICAL NACA 1-SERIES NOSE AIR INLETS AT ZERO FLIGHT SPEED. Carroll R. Bryan and Frank F. Fleming. July 1954. 30p. diagrs., photos. (NACA RM L54E19a)

AMPLITUDE OF SUPERSONIC DIFFUSER FLOW PULSATIONS. William H. Sterbentz and Joseph Davids. October 1955. 23p. diagrs. (NACA TN 3572. Supersedes RM E52I24)

(1.4.1.1.1)
Propeller-Spinner-Cowl Combinations

AN INVESTIGATION OF A FOUR-BLADE SINGLE-ROTATION PROPELLER IN COMBINATION WITH AN NACA 1-SERIES D-TYPE COWLING AT MACH NUMBERS UP TO 0.83. Robert M. Reynolds, Robert I. Sammonds, and George C. Kenyon. April 1953. 71p. diagrs., photos. (NACA RM A53B06)

PRELIMINARY RESULTS OF AN INVESTIGATION OF THE EFFECTS OF SPINNER SHAPE ON THE CHARACTERISTICS OF AN NACA D-TYPE COWL BEHIND A THREE-BLADE PROPELLER, INCLUDING THE CHARACTERISTICS OF THE PROPELLER AT NEGATIVE THRUST. Robert M. Reynolds. November 1953. 15p. diagrs., photo., tab. (NACA RM A53J02)

EFFECTS OF TWO SPINNER SHAPES ON THE PRESSURE RECOVERY IN AN NACA 1-SERIES D-TYPE COWL BEHIND A THREE-BLADE PROPELLER AT MACH NUMBERS UP TO 0.80. Ashley J. Molk and Robert M. Reynolds. March 1954. 34p. diagrs., photo., tab. (NACA RM A53L29a)

INVESTIGATION OF A THREE-BLADE PROPELLER IN COMBINATION WITH TWO DIFFERENT SPINNERS AND AN NACA D-TYPE COWL AT MACH NUMBERS UP TO 0.80. George C. Kenyon and Robert M. Reynolds. April 1954. 62p. diagrs., photos., tab. (NACA RM A54B18a)

(1.4.1.1.2)
Subsonic

PERFORMANCE OF AIR INLETS AT TRANSONIC AND LOW SUPERSONIC SPEEDS. Mark R. Nichols and Robert E. Pendley. February 1952. 22p. diagrs. (NACA RM L52A07)

(1.4.1.1.3)
Supersonic

CHARACTERISTICS OF FOUR NOSE INLETS AS MEASURED AT MACH NUMBERS BETWEEN 1.4 AND 2.0. George B. Brajnikoff and Arthur W. Rogers. June 25, 1951. 48p. diagrs., photos. (NACA RM A51C12)

PERFORMANCE OF AIR INLETS AT TRANSONIC AND LOW SUPERSONIC SPEEDS. Mark R. Nichols and Robert E. Pendley. February 1952. 22p. diagrs. (NACA RM L52A07)

SOME INTERNAL-FLOW CHARACTERISTICS AT ZERO FLIGHT SPEED OF AN ANNULAR SUPERSONIC INLET AND AN OPEN-NOSE INLET WITH SHARP AND ROUNDED LIPS. Joseph R. Milillo. July 1954. 23p. diagrs., photo. (NACA RM L54E19)

(1.4.1.2)
NOSE, ANNULAR

PRELIMINARY INVESTIGATION OF HELMHOLTZ RESONATORS FOR DAMPING PRESSURE FLUCTUATIONS IN 3.6-INCH RAM JET AT MACH NUMBER 1.90. Jerome L. Fox. May 22, 1951. 24p. diagrs., photos. (NACA RM E51C05)

CHARACTERISTICS OF FOUR NOSE INLETS AS MEASURED AT MACH NUMBERS BETWEEN 1.4 AND 2.0. George B. Brajnikoff and Arthur W. Rogers. June 25, 1951. 48p. diagrs., photos. (NACA RM A51C12)

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ESTIMATION OF INLET LIP FORCES AT SUBSONIC AND SUPERSONIC SPEEDS. W. E. Moeckel. June 1955. 12p. diagrs. (NACA TN 3457)

DESIGN CRITERIA FOR AXISYMMETRIC AND TWO-DIMENSIONAL SUPERSONIC INLETS AND EXITS. James F. Connors and Rudolph C. Meyer. January 1956. 42p. diagrs., tabs. (NACA TN 3589)

(1.4.1.3)
WING LEADING EDGE

ALTITUDE INVESTIGATION OF PERFORMANCE OF TURBINE-PROPELLER ENGINE AND ITS COMPONENTS. Lewis E. Wallner and Martin J. Saari. October 5, 1950. 65p. diagrs., photos. (NACA RM E50H30)

PERFORMANCE OF AIR INLETS AT TRANSONIC AND LOW SUPERSONIC SPEEDS. Mark R. Nichols and Robert E. Pendley. February 1952. 22p. diagrs. (NACA RM L52A07)

(1.4.1.4)
SIDE

PRELIMINARY DATA ON THE EFFECT OF BODY-NOSE BLUNTNESS ON THE DRAG AND PRESSURE RECOVERY OF A SIDE-INLET-BODY COMBINATION AT MACH NUMBERS OF 1.4 AND 1.7. John F. Stroud and Warren E. Anderson. April 25, 1951. 13p. diagrs., photos. (NACA RM A51A09)

DESIGN CRITERIA FOR AXISYMMETRIC AND TWO-DIMENSIONAL SUPERSONIC INLETS AND EXITS. James F. Connors and Rudolph C. Meyer. January 1956. 42p. diagrs., tabs. (NACA TN 3589)

(1.4.1.4.1)
Scoops

EXPERIMENTAL INVESTIGATION AT SUPERSONIC SPEEDS OF TWIN-SCOOP DUCT INLETS OF EQUAL AREA. I. - AN INLET ENCLOSING 61.5 PERCENT OF THE MAXIMUM CIRCUMFERENCE OF THE FOREBODY. Wallace F. Davis and David L. Goldstein. January 21, 1948. 16p. diagrs., photos. (NACA RM A7J27)

EXPERIMENTAL INVESTIGATION AT SUPERSONIC SPEEDS OF TWIN-SCOOP DUCT INLETS OF EQUAL AREA. II - EFFECTS OF SLOTS UPON AN INLET ENCLOSING 61.5 PERCENT OF THE MAXIMUM CIRCUMFERENCE OF THE FOREBODY. Wallace F. Davis and David L. Goldstein. June 9, 1948. 15p. diagrs., photos. (NACA RM A8C11)

EXPERIMENTAL INVESTIGATION AT SUPERSONIC SPEEDS OF TWIN-SCOOP DUCT INLETS OF EQUAL AREA. III - INLET ENCLOSING 37.2 PERCENT OF THE MAXIMUM CIRCUMFERENCE OF THE FOREBODY. Wallace F. Davis and Sherman S. Edwards. July 22, 1948. 25p. diagrs., photos. (NACA RM A8E04)

EXPERIMENTAL INVESTIGATION AT SUPERSONIC SPEEDS OF TWIN-SCOOP DUCT INLETS OF EQUAL AREA. IV - SOME EFFECTS OF INTERNAL DUCT SHAPE UPON AN INLET ENCLOSING 37.2 PERCENT OF THE FOREBODY CIRCUMFERENCE. Wallace F. Davis, Sherman S. Edwards, and George B. Brajnikoff. March 15, 1949. 21p. diagrs., photos. (NACA RM A9A31)

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SOME LOW-SPEED CHARACTERISTICS OF AN AIR-INDUCTION SYSTEM HAVING SCOOP-TYPE INLETS WITH PROVISIONS FOR BOUNDARY-LAYER CONTROL. Earl C. Watson. August 1951. 42p. diagrs., photos., tab. (NACA RM A51F15)

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EXPERIMENTAL INVESTIGATION OF INTERNAL-FLOW CHARACTERISTICS OF FORWARD UNDERSLUNG FUSELAGE SCOOPS WITH UNSWEPT AND SWEPTBACK ENTRANCE AT MACH NUMBERS OF 1.41 TO 1.96. Robert W. Boswinkle, Jr., and Meade H. Mitchell, Jr. March 1952. 34p. photos., diagrs. (NACA RM L52A24)

AN ANALYTICAL STUDY OF THE COMPARATIVE PERFORMANCE OF FOUR AIR-INDUCTION SYSTEMS FOR TURBOJET-POWERED AIRPLANES DESIGNED TO OPERATE AT MACH NUMBERS UP TO 1.5. James R. Blackaby. June 1952. 38p. diagrs. (NACA RM A52C14)

A FLIGHT COMPARISON OF A SUBMERGED INLET AND A SCOOP INLET AT TRANSONIC SPEEDS. L. Stewart Rolls. March 1953. 41p. diagrs., photo., tab. (NACA RM A53A06)

PRESSURE AND FORCE CHARACTERISTICS AT TRANSONIC SPEEDS OF A SUBMERGED DIVERGENT-WALLED AIR INLET ON A BODY OF REVOLUTION. John A. Braden and P. Kenneth Pierpont. May 1953. 65p. photos., diagrs., tabs. (NACA RM L53C13)

CHARTS OF BOUNDARY-LAYER MASS FLOW AND MOMENTUM FOR INLET PERFORMANCE ANALYSIS MACH NUMBER RANGE, 0.2 TO 5.0. Paul C. Simon and Kenneth L. Kowalski. November 1955. 32p. diagrs., tab. (NACA TN 3583)

(1.4.1.4.2)
Submerged

A FLIGHT COMPARISON OF A SUBMERGED INLET AND A SCOOP INLET AT TRANSONIC SPEEDS. L. Stewart Rolls. March 1953. 41p. diagrs., photo., tab. (NACA RM A53A06)

PRESSURE AND FORCE CHARACTERISTICS AT TRANSONIC SPEEDS OF A SUBMERGED DIVERGENT-WALLED AIR INLET ON A BODY OF REVOLUTION. John A. Braden and P. Kenneth Pierpont. May 1953. 65p. photos., diagrs., tabs. (NACA RM L53C13)

(1.4.2)
DUCTS

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF EFFECT OF SIZE AND POSITION OF CLOSED AIR DUCTS ON STATIC LONGITUDINAL AND STATIC LATERAL STABILITY CHARACTERISTICS OF UNSWEPT-MIDWING MODELS HAVING WINGS OF ASPECT RATIO 2, 4, AND 6. Byron M. Jaquet and James L. Williams. September 1955. 45p. diagrs., photos., tabs. (NACA TN 3481)

(1.4.2.1)
DIFFUSERS

PRELIMINARY INVESTIGATION OF EFFECTS OF COMBUSTION IN RAM JET ON PERFORMANCE OF SUPERSONIC DIFFUSERS. I - SHOCK DIFFUSER WITH TRIPLE-SHOCK PROJECTING CONE. J. F. Connors and A. H. Schroeder. September 15, 1948. 18p. diagrs. (NACA RM E8F15)

PRELIMINARY INVESTIGATION OF EFFECTS OF COMBUSTION IN RAM JET ON PERFORMANCE OF SUPERSONIC DIFFUSERS. II - PERFORATED SUPERSONIC INLET. Albert H. Schroeder and James F. Connors. October 4, 1948. 14p. diagrs. (NACA RM E8G16)

PRELIMINARY INVESTIGATION OF EFFECTS OF COMBUSTION IN RAM JET ON PERFORMANCE OF SUPERSONIC DIFFUSERS. III - NORMAL-SHOCK DIFFUSER. Albert H. Schroeder and James F. Connors. December 22, 1948. 15p. diagrs. (NACA RM E8J18)

EXPERIMENTAL INVESTIGATION OF PRESSURE FLUCTUATIONS IN 3.6-INCH RAM JET AT MACH NUMBER 1.92. James F. Connors and Albert H. Schroeder. October 13, 1949. 20p. diagrs., photos. (NACA RM E9H12)

THEORETICAL AND EXPERIMENTAL ANALYSIS OF LOW-DRAG SUPERSONIC INLETS HAVING A CIRCULAR CROSS SECTION AND A CENTRAL BODY AT MACH NUMBERS OF 3.30, 2.75, AND 2.45. Antonio Ferri and Louis M. Nucci. 1954. ii, 37p. diagrs., photos. (NACA Rept. 1189. Supersedes RM L8H13)

FLIGHT DETERMINATION OF THE DRAG AND PRESSURE RECOVERY OF AN NACA 1-40-250 NOSE INLET AT MACH NUMBERS FROM 0.9 TO 1.8. R. I. Sears and C. F. Merlet. July 1955. 30p. diagrs., photos., 2 tabs. (NACA TN 3218. Formerly RM L50L18)

PRELIMINARY INVESTIGATION OF A FAMILY OF DIFFUSERS DESIGNED FOR NEAR SONIC INLET VELOCITIES. Richard Scherrer and Warren E. Anderson. February 1956. 43p. diagrs., photo. (NACA TN 3668)

(1.4.2.1.1) Subsonic

SOME LOW-SPEED CHARACTERISTICS OF AN AIR-INDUCTION SYSTEM HAVING SCOOP-TYPE INLETS WITH PROVISIONS FOR BOUNDARY-LAYER CONTROL. Earl C. Watson. August 1951. 42p. diagrs., photos., tab. (NACA RM A51F15)

AN ANALYTICAL STUDY OF THE COMPARATIVE PERFORMANCE OF FOUR AIR-INDUCTION SYSTEMS FOR TURBOJET-POWERED AIRPLANES DESIGNED TO OPERATE AT MACH NUMBERS UP TO 1.5. James R. Blackaby. June 1952. 38p. diagrs. (NACA RM A52C14)

FLOW DIFFUSION IN A CONSTANT-DIAMETER DUCT DOWNSTREAM OF AN ABRUPTLY TERMINATED CENTER BODY. Charles C. Wood and James T. Higginbotham. July 1953. 27p. diagrs. (NACA RM L53D23)

THEORETICAL PERFORMANCE CHARACTERISTICS OF SHARP-LIP INLETS AT SUBSONIC SPEEDS. Evan A. Fradenburgh and DeMarquis D. Wyatt. 1954. ii, 8p. diagrs. (NACA Rept. 1193. Formerly TN 3004)

PERFORMANCE AND BOUNDARY-LAYER DATA FROM 12° AND 23° CONICAL DIFFUSERS OF AREA RATIO 2.0 AT MACH NUMBERS UP TO CHOKING AND REYNOLDS NUMBERS UP TO 7.5×10^6. B. H. Little, Jr., and Stafford W. Wilbur. 1954. ii, 23p. diagrs., tabs. (NACA Rept. 1201. Supersedes RM L9H10; RM L9K10; RM L50C02a)

PRELIMINARY INVESTIGATION OF THE FLOW IN AN ANNULAR-DIFFUSER—TAILPIPE COMBINATION WITH AN ABRUPT AREA EXPANSION AND SUCTION, INJECTION, AND VORTEX-GENERATOR FLOW CONTROLS. John R. Henry and Stafford W. Wilbur. February 1954. 27p. diagrs. (NACA RM L53K30)

PRELIMINARY INVESTIGATION OF SHORT TWO-DIMENSIONAL SUBSONIC DIFFUSERS. Richard R. Woollett. May 1956. 19p. diagrs., photos., tab. (NACA RM E56C02)

(1.4.2.1.2) Supersonic

PRELIMINARY INVESTIGATION OF HELMHOLTZ RESONATORS FOR DAMPING PRESSURE FLUCTUATIONS IN 3.6-INCH RAM JET AT MACH NUMBER 1.90. Jerome L. Fox. May 22, 1951. 24p. diagrs., photos. (NACA RM E51C05)

CHARACTERISTICS OF FOUR NOSE INLETS AS MEASURED AT MACH NUMBERS BETWEEN 1.4 AND 2.0. George B. Brajnikoff and Arthur W. Rogers. June 25, 1951. 48p. diagrs., photos. (NACA RM A51C12)

THEORETICAL PERFORMANCE CHARACTERISTICS OF SHARP-LIP INLETS AT SUBSONIC SPEEDS. Evan A. Fradenburgh and DeMarquis D. Wyatt. 1954. ii, 8p. diagrs. (NACA Rept. 1193. Formerly TN 3004)

SOME OBSERVATIONS OF SHOCK-INDUCED TURBULENT SEPARATION ON SUPERSONIC DIFFUSERS. T. J. Nussdorfer. May 1954. 14p. diagrs., photos. (NACA RM E51L26)

EXPLORATORY INVESTIGATION OF FLOW IN THE SEPARATED REGION AHEAD OF TWO BLUNT BODIES AT MACH NUMBER 2. Harry Bernstein and William E. Brunk. June 1955. 27p. diagrs., photos. (NACA RM E55D07b)

CRITERIONS FOR PREDICTION AND CONTROL OF RAM-JET FLOW PULSATIONS. William H. Sterbentz and John C. Evvard. August 1955. 60p. diagrs., photos. (NACA TN 3506. Formerly RM E51C27)

AMPLITUDE OF SUPERSONIC DIFFUSER FLOW PULSATIONS. William H. Sterbentz and Joseph Davids. October 1955. 23p. diagrs. (NACA TN 3572. Supersedes RM E52I24)

ACOUSTIC ANALYSIS OF RAM-JET BUZZ. Harold Mirels. November 1955. 33p diagrs. (NACA TN 3574)

INVESTIGATION OF THE EFFECT OF SHORT FIXED DIFFUSERS ON STARTING BLOWDOWN JETS IN THE MACH NUMBER RANGE FROM 2.7 TO 4.5. John A. Moore. January 1956. 32p. diagrs., photos. (NACA TN 3545)

DESIGN CRITERIA FOR AXISYMMETRIC AND TWO-DIMENSIONAL SUPERSONIC INLETS AND EXITS. James F. Connors and Rudolph C. Meyer. January 1956. 42p. diagrs., tabs. (NACA TN 3589)

(1.4.2.2) NOZZLES

INVESTIGATION OF EFFECTS OF MOVABLE EXHAUST-NOZZLE PLUG ON OPERATIONAL PERFORMANCE OF 20-INCH RAM JET. William H. Sterbentz and Fred A. Wilcox. July 27, 1948. 32p. diagrs., photos. (NACA RM E8D22)

AERODYNAMIC INVESTIGATION OF A PARABOLIC BODY OF REVOLUTION AT MACH NUMBER OF 1.92 AND SOME EFFECTS OF AN ANNULAR JET EXHAUSTING FROM THE BASE. Eugene S. Love. February 8, 1950. 75p. diagrs., photos., tab. (NACA RM L9K09)

PRELIMINARY INVESTIGATION OF A PERFORATED AXIALLY SYMMETRIC NOZZLE FOR VARYING NOZZLE PRESSURE RATIOS. Eli Reshotko. January 1953. 43p. diagrs., photo., 2 tabs. (NACA RM E52J27)

AN ANALYTICAL STUDY OF THE EFFECT OF AIRPLANE WAKE ON THE LATERAL DISPERSION OF AERIAL SPRAYS. Wilmer H. Reed, III. 1954. ii, 16p. diagrs., 3 tabs. (NACA Rept. 1196. Formerly TN 3032)

(1.4.2.3)
PIPES

AVERAGING OF PERIODIC PRESSURE PULSATIONS BY A TOTAL-PRESSURE PROBE. R. C. Johnson. October 1955. 30p. diagrs., photo., tabs. (NACA TN 3568)

(1.4.2.4)
BENDS

PRELIMINARY INVESTIGATION OF A FAMILY OF DIFFUSERS DESIGNED FOR NEAR SONIC INLET VELOCITIES. Richard Scherrer and Warren E. Anderson. February 1956 43p. diagrs., photo. (NACA TN 3668)

A STUDY OF THE HIGH-SPEED PERFORMANCE CHARACTERISTICS OF 90° BENDS IN CIRCULAR DUCTS. James T. Higginbotham, Charles C. Wood, and E. Floyd Valentine. June 1956. 28p. diagrs. (NACA TN 3696)

(1.4.3)
EXITS

INVESTIGATION AT MACH NUMBER 1.91 OF SPREADING CHARACTERISTICS OF JET EXPANDING FROM CHOKED NOZZLES. Morris D. Rousso and L. Eugene Baughman. February 1952. 27p. photos., diagrs. (NACA RM E51L19)

PRELIMINARY INVESTIGATION OF A PERFORATED AXIALLY SYMMETRIC NOZZLE FOR VARYING NOZZLE PRESSURE RATIOS. Eli Reshotko. January 1953. 43p. diagrs., photo., 2 tabs. (NACA RM E52J27)

PRELIMINARY INVESTIGATION OF SEVERAL TARGET-TYPE THRUST-REVERSAL DEVICES. Fred W. Steffen, H. George Krull and Carl C. Ciepluch. March 1954. 43p. diagrs., tab. (NACA RM E53L15b)

AN INVESTIGATION OF THE DISCHARGE AND DRAG CHARACTERISTICS OF AUXILIARY-AIR OUTLETS DISCHARGING INTO A TRANSONIC STREAM. Paul E. Dewey and Allen R. Vick. July 1955. 38p. diagrs., photos. (NACA TN 3466)

SUMMARY EVALUATION OF TOOTHED-NOZZLE ATTACHMENTS AS A JET-NOISE-SUPPRESSION DEVICE. Warren J. North. July 1955. 19p. diagrs., photo. (NACA TN 3516)

PERFORMANCE CHARACTERISTICS OF HEMISPHERICAL TARGET-TYPE THRUST REVERSERS. Fred W. Steffen, Jack G. McArdle, and James W. Coats. September 1955. 39p. diagrs., photos., tab. (NACA RM E55E18)

EFFECT OF EXHAUST-NOZZLE EJECTORS ON TURBOJET NOISE GENERATION. Warren J. North and Willard D. Coles. October 1955. 26p. diagrs., photo. (NACA TN 3573)

PERFORMANCE CHARACTERISTICS OF CYLINDRICAL TARGET-TYPE THRUST REVERSERS. Fred W. Steffen and Jack G. McArdle. January 1956. 40p. diagrs., photo. (NACA RM E55I29)

DESIGN CRITERIA FOR AXISYMMETRIC AND TWO-DIMENSIONAL SUPERSONIC INLETS AND EXITS. James F. Connors and Rudolph C. Meyer. January 1956. 42p. diagrs., tabs. (NACA TN 3589)

INVESTIGATION OF FAR NOISE FIELD OF JETS. I - EFFECT OF NOZZLE SHAPE. Edmund E. Callaghan and Willard D. Coles. January 1956. 44p. diagrs., photos. (NACA TN 3590)

INVESTIGATION OF FAR NOISE FIELD OF JETS. II - COMPARISON OF AIR JETS AND JET ENGINES. Willard D. Coles and Edmund E. Callaghan. January 1956. 19p. diagrs., photos. (NACA TN 3591)

SUMMARY OF SCALE-MODEL THRUST-REVERSER INVESTIGATION. John H. Povolny, Fred W. Steffen, and Jack G. McArdle. February 1956. 49p. diagrs., photos. (NACA TN 3664)

(1.4.4)
JET PUMPS AND THRUST AUGMENTORS

PERFORMANCE CHARACTERISTICS OF AIRCRAFT COOLING EJECTORS HAVING SHORT CYLINDRICAL SHROUDS. Fred D. Kochendorfer and Morris D. Rousso. May 22, 1951. 39p. diagrs. (NACA RM E51E01)

PRELIMINARY AIR-FLOW AND THRUST CALIBRATIONS OF SEVERAL CONICAL COOLING-AIR EJECTORS WITH A PRIMARY TO SECONDARY TEMPERATURE RATIO OF 1.0. I - DIAMETER RATIOS OF 1.21 AND 1.10. W. K. Greathouse ar D. P. Hollister. July 1952. 24p. diagrs. (NACA RM E52E21)

PRELIMINARY AIR-FLOW AND THRUST CALIBRATIONS OF SEVERAL CONICAL COOLING-AIR EJECTORS WITH A PRIMARY TO SECONDARY TEMPERATURE RATIO OF 1.0. II - DIAMETER RATIOS OF 1.06 AND 1.40. W. K. Greathouse and D. P. Hollister. August 1952. 35p. diagrs. (NACA RM E52F26)

EFFECT OF EXHAUST-NOZZLE EJECTORS ON TURBOJET NOISE GENERATION. Warren J. North and Willard D. Coles. October 1955. 26p. diagrs., photo. (NACA TN 3573)

(1.4.5) CASCADES

COMPARISON OF NACA 65-SERIES COMPRESSOR-BLADE PRESSURE DISTRIBUTIONS AND PERFORMANCE IN A ROTOR AND IN CASCADE. Willard R. Westphal and William R. Godwin. November 1951. 53p. diagrs., photos. (NACA RM L51H20)

METHOD OF ESTIMATING THE INCOMPRESSIBLE-FLOW PRESSURE DISTRIBUTION OF COMPRESSOR BLADE SECTIONS AT DESIGN ANGLE OF ATTACK. John R. Erwin and Laura A. Yacobi. December 1953. 41p. diagrs., tab. (NACA RM L53F17)

PRELIMINARY PERFORMANCE DATA OF SEVERAL TAIL-PIPE-CASCADE-TYPE MODEL THRUST REVERSERS. James G. Henzel, Jr. and Jack G. McArdle. August 1955. 48p. diagrs., photos., tab. (NACA RM E55F09)

SUMMARY OF SCALE-MODEL THRUST-REVERSER INVESTIGATION. John H. Povolny, Fred W. Steffen, and Jack G. McArdle. February 1956. 49p. diagrs., photos. (NACA TN 3664)

FLOW OF GAS THROUGH TURBINE LATTICES. M. E. Deich. May 1956. 136p. diagrs., photos. (NACA TM 1393. Trans. of Russian book: Technical Gasdynamics, ch. 7, 1953, p. 312-420)

(1.4.5.1) THEORY

THEORETICAL ANALYSIS OF INCOMPRESSIBLE FLOW THROUGH A RADIAL-INLET CENTRIFUGAL IMPELLER AT VARIOUS WEIGHT FLOWS. I - SOLUTION BY A MATRIX METHOD AND COMPARISON WITH AN APPROXIMATE METHOD. Vasily D. Prian, James J. Kramer and Chung-Hua Wu. June 1955. 39p. diagrs., tab. (NACA TN 3448)

THEORETICAL ANALYSIS OF INCOMPRESSIBLE FLOW THROUGH A RADIAL-INLET CENTRIFUGAL IMPELLER AT VARIOUS WEIGHT FLOWS. II - SOLUTION IN LEADING-EDGE REGION BY RELAXATION METHODS. James J. Kramer. June 1955. 19p. diagrs. (NACA TN 3449)

THEORETICAL LOSS RELATIONS FOR LOW-SPEED TWO-DIMENSIONAL-CASCADE FLOW. Seymour Lieblein and William H. Roudebush. March 1956. 46p. diagrs., tab. (NACA TN 3662)

FLAT PLATE CASCADES AT SUPERSONIC SPEED. (Ebene Plattengitter bei Überschallgeschwindigkeit). Rashad M. El Badrawy. May 1956. iii, 130p. diagrs., photos., tabs. (NACA TM 1369. Trans. of Eidgenössische Technische Hochschule Zürich. Institut für Aerodynamik. Mitteilungen 19)

STALL PROPAGATION IN AXIAL-FLOW COMPRESSORS. Alan H. Stenning, Anthony R. Kriebel, and Stephen R. Montgomery, Massachusetts Institute of Technology. June 1956. 83p. diagrs., photos., tab. (NACA TN 3580)

(1.4.5.2) EXPERIMENT

TWO-DIMENSIONAL CASCADE INVESTIGATION OF THE MAXIMUM EXIT TANGENTIAL VELOCITY COMPONENT AND OTHER FLOW CONDITIONS AT THE EXIT OF SEVERAL TURBINE BLADE DESIGNS AT SUPERCRITICAL PRESSURE RATIOS. Cavour H. Hauser and Henry W. Plohr. August 1951. 34p. diagrs., photos. (NACA RM E51F12)

SYSTEMATIC TWO-DIMENSIONAL CASCADE TESTS OF NACA 65-SERIES COMPRESSOR BLADES AT LOW SPEEDS. L. Joseph Herrig, James C. Emery, and John R. Erwin. September 1951. 223p. diagrs., photo., tabs. (NACA RM L51G31)

SOME EFFECTS OF BLADE TRAILING-EDGE THICKNESS ON PERFORMANCE OF A SINGLE-STAGE AXIAL-FLOW COMPRESSOR. J. J. Moses and G. K. Serovy. October 1951. 14p. diagrs., tab. (NACA RM E51F28)

EFFECT OF SECTION THICKNESS AND TRAILING-EDGE RADIUS ON THE PERFORMANCE OF NACA 65-SERIES COMPRESSOR BLADES IN CASCADE AT LOW SPEEDS. L. Joseph Herrig, James C. Emery, and John R. Erwin. December 1951. 66p. diagrs., tabs. (NACA RM L51J16)

A COMPARISON OF TYPICAL NATIONAL GAS TURBINE ESTABLISHMENT AND NACA AXIAL-FLOW COMPRESSOR BLADE SECTIONS IN CASCADE AT LOW SPEED. A. Richard Felix and James C. Emery. May 1953. 46p. diagrs., photo., tabs. (NACA RM L53B26a)

TWO-DIMENSIONAL LOW-SPEED CASCADE INVESTIGATION OF NACA COMPRESSOR BLADE SECTIONS HAVING A SYSTEMATIC VARIATION IN MEAN-LINE LOADING. John R. Erwin, Melvyn Savage, and James C. Emery. November 1953. 129p. diagrs., tabs. (NACA RM L53I30b)

INVESTIGATION OF A RELATED SERIES OF TURBINE-BLADE PROFILES IN CASCADE. James C. Dunavant and John R. Erwin. December 1953. 100p. diagrs. (NACA RM L53G15)

SUMMARY OF 65-SERIES COMPRESSOR-BLADE LOW-SPEED CASCADE DATA BY USE OF THE CARPET-PLOTTING TECHNIQUE. A. Richard Felix. November 1954. 9p. diagrs. (NACA RM L54H18a)

EXPERIMENTAL INVESTIGATION OF BLADE FLUTTER IN AN ANNULAR CASCADE. J. R. Rowe and A. Mendelson. November 1955. 24p. diagrs., photos. (NACA TN 3581)

STALL PROPAGATION IN AXIAL-FLOW COMPRESSORS. Alan H. Stenning, Anthony R. Kriebel, and Stephen R. Montgomery, Massachusetts Institute of Technology. June 1956. 83p. diagrs., photos., tab. (NACA TN 3580)

(1.4.6) FANS

COMPARISON OF NACA 65-SERIES COMPRESSOR-BLADE PRESSURE DISTRIBUTIONS AND PERFORMANCE IN A ROTOR AND IN CASCADE. Willard R. Westphal and William R. Godwin. November 1951. 53p. diagrs., photos. (NACA RM L51H20)

(1.4.7) BOUNDARY LAYER

FLOW DIFFUSION IN A CONSTANT-DIAMETER DUCT DOWNSTREAM OF AN ABRUPTLY TERMINATED CENTER BODY. Charles C. Wood and James T. Higginbotham. July 1953. 27p. diagrs. (NACA RM L53D23)

PERFORMANCE AND BOUNDARY-LAYER DATA FROM 12° AND 23° CONICAL DIFFUSERS OF AREA RATIO 2.0 AT MACH NUMBERS UP TO CHOKING AND REYNOLDS NUMBERS UP TO 7.5×10^6. B. H. Little, Jr., and Stafford W. Wilbur. 1954. ii, 23p. diagrs., tabs. (NACA Rept. 1201. Supersedes RM L9H10; RM L9K10; RM L50C02a)

SOME INTERNAL-FLOW CHARACTERISTICS OF SEVERAL AXISYMMETRICAL NACA 1-SERIES NOSE AIR INLETS AT ZERO FLIGHT SPEED. Carroll R. Bryan and Frank F. Fleming. July 1954. 30p. diagrs., photos. (NACA RM L54E19a)

PRESSURE RISE ASSOCIATED WITH SHOCK-INDUCED BOUNDARY-LAYER SEPARATION. Eugene S. Love. December 1955. 32p. diagrs. (NACA TN 3601)

CROSS FLOWS IN LAMINAR INCOMPRESSIBLE BOUNDARY LAYERS. Arthur G. Hansen and Howard Z. Herzig. February 1956. 50p. diagrs., photos., tabs. (NACA TN 3651)

(1.4.7.1) CHARACTERISTICS

INTERSTAGE SURVEYS AND ANALYSIS OF VISCOUS ACTION IN LATTER STAGES OF A MULTISTAGE AXIAL-FLOW COMPRESSOR. William B. Briggs and Charles C. Giamati. March 1953. 51p. diagrs., photo., tab. (NACA RM E52I12)

VISUALIZATION STUDY OF SECONDARY FLOWS IN TURBINE ROTOR TIP REGIONS. Hubert W. Allen and Milton G. Kofskey. September 1955. 33p. diagrs., photos., tab. (NACA TN 3519)

A SURVEY OF UNCLASSIFIED AXIAL-FLOW-COMPRESSOR LITERATURE. Howard Z. Herzig and Arthur G. Hansen. November 1955. i, 88p. (NACA RM E55H11)

CHARTS OF BOUNDARY-LAYER MASS FLOW AND MOMENTUM FOR INLET PERFORMANCE ANALYSIS MACH NUMBER RANGE, 0.2 TO 5.0. Paul C. Simon and Kenneth L. Kowalski. November 1955. 32p. diagrs., tab. (NACA TN 3583)

CROSS FLOWS IN LAMINAR INCOMPRESSIBLE BOUNDARY LAYERS. Arthur G. Hansen and Howard Z. Herzig. February 1956. 50p. diagrs., photos., tabs. (NACA TN 3651)

PRELIMINARY INVESTIGATION OF A FAMILY OF DIFFUSERS DESIGNED FOR NEAR SONIC INLET VELOCITIES. Richard Scherrer and Warren E. Anderson. February 1956. 43p. diagrs., photo. (NACA TN 3668)

FLOW OF GAS THROUGH TURBINE LATTICES. M. E. Deich. May 1956. 136p. diagrs., photos. (NACA TM 1393. Trans. of Russian book: Technical Gasdynamics, ch. 7, 1953, p. 312-420)

PRELIMINARY REPORT ON A STUDY OF SEPARATED FLOWS IN SUPERSONIC AND SUBSONIC STREAMS. Dean R. Chapman, Donald M. Kuehn, and Howard K. Larson. June 1956. 15p. diagrs., photos. (NACA RM A55L14)

(1.4.7.2) CONTROL

SOME LOW-SPEED CHARACTERISTICS OF AN AIR-INDUCTION SYSTEM HAVING SCOOP-TYPE INLETS WITH PROVISIONS FOR BOUNDARY-LAYER CONTROL. Earl C. Watson. August 1951. 42p. diagrs., photos., tab. (NACA RM A51F15)

A FLIGHT COMPARISON OF A SUBMERGED INLET AND A SCOOP INLET AT TRANSONIC SPEEDS. L. Stewart Rolls. March 1953. 41p. diagrs., photo., tab. (NACA RM A53A06)

PRELIMINARY INVESTIGATION OF THE FLOW IN AN ANNULAR-DIFFUSER—TAILPIPE COMBINATION WITH AN ABRUPT AREA EXPANSION AND SUCTION, INJECTION, AND VORTEX-GENERATOR FLOW CONTROLS. John R. Henry and Stafford W. Wilbur. February 1954. 27p. diagrs. (NACA RM L53K30)

SOME OBSERVATIONS OF SHOCK-INDUCED TURBULENT SEPARATION ON SUPERSONIC DIFFUSERS. T. J. Nussdorfer. May 1954. 14p. diagrs., photos. (NACA RM E51L26)

CHARTS OF BOUNDARY-LAYER MASS FLOW AND MOMENTUM FOR INLET PERFORMANCE ANALYSIS MACH NUMBER RANGE, 0.2 TO 5.0. Paul C. Simon and Kenneth L. Kowalski. November 1955. 32p. diagrs., tab. (NACA TN 3583)

ON THE PERMEABILITY OF POROUS MATERIALS. E. Carson Yates, Jr. January 1956. 31p. diagrs. (NACA TN 3596)

PERFORATED SHEETS AS A POROUS MATERIAL FOR DISTRIBUTED SUCTION AND INJECTION. Robert E. Dannenberg, Bruno J. Gambucci, and James A. Weiberg. April 1956. 27p. diagrs., photos. (NACA TN 3669)

(1.5)
Propellers

(1.5.1)
THEORY

A THEORETICAL STUDY OF THE EFFECT OF FORWARD SPEED ON THE FREE-SPACE SOUND-PRESSURE FIELD AROUND PROPELLERS. I. E. Garrick and Charles E. Watkins. 1954. ii, 16p. diagrs., tab. (NACA Rept. 1198. Supersedes TN 3018)

EXPERIMENTAL AND CALCULATED STATIC CHARACTERISTICS OF A TWO-BLADE NACA 10-(3)(062)-045 PROPELLER. John M. Swihart. March 1954. 20p. diagrs., photos., tab. (NACA RM L54A19)

(1.5.2)
DESIGN VARIABLES

FLUTTER OF THIN PROPELLER BLADES, INCLUDING EFFECTS OF MACH NUMBER, STRUCTURAL DAMPING, AND VIBRATORY-STRESS MEASUREMENTS NEAR THE FLUTTER BOUNDARIES. Harvey H. Hubbard, Marvin F. Burgess, and Maurice A. Sylvester. June 1956. 25p. diagrs., tab. (NACA TN 3707)

(1. 5. 2. 1)
BLADE SECTIONS

THE EFFECT OF BLADE-SECTION CAMBER ON THE STALL-FLUTTER CHARACTERISTICS OF THREE NACA PROPELLERS AT ZERO ADVANCE. Arthur E. Allis and John M. Swihart. April 1953. 29p. diagrs., photo., tab. (NACA RM L53B17)

(1. 5. 2. 2)
SOLIDITY

INVESTIGATION OF THE NACA 4-(5)(05)-037 SIX- AND EIGHT-BLADE, DUAL-ROTATION PROPELLERS AT POSITIVE AND NEGATIVE THRUST AT MACH NUMBERS UP TO 0.90, INCLUDING SOME AERODYNAMIC CHARACTERISTICS OF THE NACA 4-(5)(05)-041 TWO- AND FOUR-BLADE, SINGLE-ROTATION PROPELLERS. John H. Walker and Robert M. Reynolds. October 1954. 148p. diagrs., photos., tabs. (NACA RM A54G13)

(1. 5. 2. 5)
MACH NUMBER EFFECTS

AN INVESTIGATION OF A FOUR-BLADE SINGLE-ROTATION PROPELLER IN COMBINATION WITH AN NACA 1-SERIES D-TYPE COWLING AT MACH NUMBERS UP TO 0.83. Robert M. Reynolds, Robert I. Sammonds, and George C. Kenyon. April 1953. 71p. diagrs., photos. (NACA RM A53B06)

PRELIMINARY RESULTS OF AN INVESTIGATION OF THE EFFECTS OF SPINNER SHAPE ON THE CHARACTERISTICS OF AN NACA D-TYPE COWL BEHIND A THREE-BLADE PROPELLER, INCLUDING THE CHARACTERISTICS OF THE PROPELLER AT NEGATIVE THRUST. Robert M. Reynolds. November 1953. 15p. diagrs., photo., tab. (NACA RM A53J02)

A THEORETICAL STUDY OF THE EFFECT OF FORWARD SPEED ON THE FREE-SPACE SOUND-PRESSURE FIELD AROUND PROPELLERS. I. E. Garrick and Charles E. Watkins. 1954. ii, 16p. diagrs., tab. (NACA Rept. 1198. Supersedes TN 3018)

EXPERIMENTAL AND CALCULATED STATIC CHARACTERISTICS OF A TWO-BLADE NACA 10-(3)(062)-045 PROPELLER. John M. Swihart. March 1954. 20p. diagrs., photos., tab. (NACA RM L54A19)

INVESTIGATION OF A THREE-BLADE PROPELLER IN COMBINATION WITH TWO DIFFERENT SPINNERS AND AN NACA D-TYPE COWL AT MACH NUMBERS UP TO 0.80. George C. Kenyon and Robert M. Reynolds. April 1954. 62p. diagrs., photos., tab. (NACA RM A54B18a)

INVESTIGATION OF THE NACA 4-(5)(05)-037 SIX- AND EIGHT-BLADE, DUAL-ROTATION PROPELLERS AT POSITIVE AND NEGATIVE THRUST AT MACH NUMBERS UP TO 0.90, INCLUDING SOME AERODYNAMIC CHARACTERISTICS OF THE NACA 4-(5)(05)-041 TWO- AND FOUR-BLADE, SINGLE-ROTATION PROPELLERS. John H. Walker and Robert M. Reynolds. October 1954. 148p. diagrs., photos., tabs. (NACA RM A54G13)

ON THE GAS DYNAMICS OF A ROTATING IMPELLER. (Zur Gasdynamik des drehenden Schaufelsterns). A. Busemann. March 1956. 16p. diagrs. (NACA TM 1385. Trans. from Zeitschrift für angewandte Mathematik und Mechanik, v. 18, no. 1, February 1938, p. 31-38)

(1. 5. 2. 7)
DUAL ROTATION

DYNAMIC INVESTIGATION OF TURBINE-PROPELLER ENGINE UNDER ALTITUDE CONDITIONS. Richard P. Krebs, Seymour C. Himmel, Darnold Blivas, and Harold Shames. December 6, 1950. 55p diagrs., photo. (NACA RM E50J24)

DYNAMIC STABILITY AND CONTROL CHARACTERISTICS OF A VERTICALLY RISING AIRPLANE MODEL IN HOVERING FLIGHT. William R. Bates, Powell M. Lovell, Jr., and Charles C. Smith, Jr. February 23, 1951. 16p. diagrs., photos., tab. (NACA RM L50J16)

EFFECT OF THE PROXIMITY OF THE GROUND ON THE STABILITY AND CONTROL CHARACTERISTICS OF A VERTICALLY RISING AIRPLANE MODEL IN THE HOVERING CONDITION. Charles C. Smith, Jr., Powell M. Lovell, Jr., and William R. Bates. September 1951. 16p. diagrs., tab. (NACA RM L51G05)

ADDITIONAL STUDIES OF THE STABILITY AND CONTROLLABILITY OF AN UNSWEPT-WING VERTICALLY RISING AIRPLANE MODEL IN HOVERING FLIGHT INCLUDING STUDIES OF VARIOUS TETHERED LANDING TECHNIQUES. William R. Bates, Powell M. Lovell, Jr., and Charles C. Smith, Jr. Movember 1951. 25p. diagrs., photos., tab. (NACA RM L51I07a)

INVESTIGATION OF THE NACA 4-(5)(05)-037 SIX- AND EIGHT-BLADE, DUAL-ROTATION PROPELLERS AT POSITIVE AND NEGATIVE THRUST AT MACH NUMBERS UP TO 0.90, INCLUDING SOME AERODYNAMIC CHARACTERISTICS OF THE NACA 4-(5)(05)-041 TWO- AND FOUR-BLADE, SINGLE-ROTATION PROPELLERS. John H. Walker and Robert M. Reynolds. October 1954. 148p. diagrs., photos., tabs. (NACA RM A54G13)

VIBRATORY-STRESS INVESTIGATION OF SIX- AND EIGHT-BLADE DUAL-ROTATING PROPELLERS OPERATING AT ZERO ADVANCE. Atwood R. Heath, Jr. and Robert L. O'Neal. February 1955. 26p. diagrs., photo., tabs. (NACA RM L54J28)

VELOCITY DISTRIBUTIONS MEASURED IN THE SLIPSTREAM OF EIGHT-BLADE AND SIX-BLADE DUAL-ROTATING PROPELLERS AT ZERO ADVANCE. Leland B. Salters, Jr. June 1955. 27p. diagrs., photo. (NACA RM L55D21)

(1.5.2.8)
INTERFERENCE OF BODIES

THE EFFECTS OF COMPRESSIBILITY ON THE UPWASH AT THE PROPELLER PLANES OF A FOUR-ENGINE TRACTOR AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. Armando E. Lopez and Jerald K. Dickson. April 1953. 38p. diagrs., photos., tab. (NACA RM A53A30a)

AN INVESTIGATION OF A FOUR-BLADE SINGLE-ROTATION PROPELLER IN COMBINATION WITH AN NACA 1-SERIES D-TYPE COWLING AT MACH NUMBERS UP TO 0.83. Robert M. Reynolds, Robert I. Sammonds, and George C. Kenyon. April 1953. 71p. diagrs., photos. (NACA RM A53B06)

PRELIMINARY RESULTS OF AN INVESTIGATION OF THE EFFECTS OF SPINNER SHAPE ON THE CHARACTERISTICS OF AN NACA D-TYPE COWL BEHIND A THREE-BLADE PROPELLER, INCLUDING THE CHARACTERISTICS OF THE PROPELLER AT NEGATIVE THRUST. Robert M. Reynolds. November 1953. 15p. diagrs., photo., tab. (NACA RM A53J02)

INVESTIGATION OF A THREE-BLADE PROPELLER IN COMBINATION WITH TWO DIFFERENT SPINNERS AND AN NACA D-TYPE COWL AT MACH NUMBERS UP TO 0.80. George C. Kenyon and Robert M. Reynolds. April 1954. 62p. diagrs., photos., tab. (NACA RM A54B18a)

(1.5.2.9)
PITCH AND YAW

A WIND-TUNNEL INVESTIGATION OF THE EFFECTS OF THRUST-AXIS INCLINATION ON PROPELLER FIRST-ORDER VIBRATION. W. H. Gray, J. M. Hallissy, Jr., and A. R. Heath, Jr. 1954. ii, 37p. diagrs., photo., tab. (NACA Rept. 1205. Supersedes RM L50D13)

AERODYNAMIC CHARACTERISTICS OF A SMALL-SCALE SHROUDED PROPELLER AT ANGLES OF ATTACK FROM 0° TO 90°. Lysle P. Parlett. November 1955. 12p. diagrs. (NACA TN 3547)

(1.5.3)
DESIGNATED TYPES

AN INVESTIGATION OF A FOUR-BLADE SINGLE-ROTATION PROPELLER IN COMBINATION WITH AN NACA 1-SERIES D-TYPE COWLING AT MACH NUMBERS UP TO 0.83. Robert M. Reynolds, Robert I. Sammonds, and George C. Kenyon. April 1953. 71p. diagrs., photos. (NACA RM A53B06)

INVESTIGATION OF A THREE-BLADE PROPELLER IN COMBINATION WITH TWO DIFFERENT SPINNERS AND AN NACA D-TYPE COWL AT MACH NUMBERS UP TO 0.80. George C. Kenyon and Robert M. Reynolds. April 1954. 62p. diagrs., photos., tab. (NACA RM A54B18a)

INVESTIGATION OF THE NACA 4-(5)(05)-037 SIX- AND EIGHT-BLADE, DUAL-ROTATION PROPELLERS AT POSITIVE AND NEGATIVE THRUST AT MACH NUMBERS UP TO 0.90, INCLUDING SOME AERODYNAMIC CHARACTERISTICS OF THE NACA 4-(5)(05)-041 TWO- AND FOUR-BLADE, SINGLE-ROTATION PROPELLERS. John H. Walker and Robert M. Reynolds. October 1954. 148p. diagrs., photos., tabs. (NACA RM A54G13)

FLAT PLATE CASCADES AT SUPERSONIC SPEED (Ebene Plattengitter bei Überschallgeschwindigkeit) Rashad M. El Badrawy. May 1956. iii, 130p. diagrs., photos., tabs. (NACA TM 1369. Trans. of Eidgenössische Technische Hochschule Zürich. Institut für Aerodynamik. Mitteilungen 19)

(1.5.4)
SLIPSTREAM

EFFECT OF THE PROXIMITY OF THE GROUND ON THE STABILITY AND CONTROL CHARACTERISTICS OF A VERTICALLY RISING AIRPLANE MODEL IN THE HOVERING CONDITION. Charles C. Smith, Jr., Powell M. Lovell, Jr., and William R. Bates. September 1951. 16p. diagrs., tab. (NACA RM L51G05)

EFFECTS OF OPERATING PROPELLERS ON THE WING-SURFACE PRESSURES OF A FOUR-ENGINE TRACTOR AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK. Carl D. Kolbe and Frederick W. Boltz. April 1954. 133p. diagrs., photo., 19 tabs. (NACA RM A53L29)

ANALYSIS OF WIND-TUNNEL TESTS AT LOW SPEEDS OF A FOUR-ENGINE PROPELLER-DRIVEN AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK. George G. Edwards and Donald A. Buell. October 1954. 137p. diagrs., photos., 2 tabs. (NACA RM A54F14)

VELOCITY DISTRIBUTIONS MEASURED IN THE SLIPSTREAM OF EIGHT-BLADE AND SIX-BLADE DUAL-ROTATING PROPELLERS AT ZERO ADVANCE. Leland B. Salters, Jr. June 1955. 27p. diagrs., photo. (NACA RM L55D21)

INVESTIGATION OF THE EFFECTS OF GROUND PROXIMITY AND PROPELLER POSITION ON THE EFFECTIVENESS OF A WING WITH LARGE-CHORD SLOTTED FLAPS IN REDIRECTING PROPELLER SLIPSTREAMS DOWNWARD FOR VERTICAL TAKE-OFF. Richard E. Kuhn. March 1956. 38p. diagrs., photos., tab. (NACA TN 3629)

INVESTIGATION AT ZERO FORWARD SPEED OF A LEADING-EDGE SLAT AS A LONGITUDINAL CONTROL DEVICE FOR VERTICALLY RISING AIRPLANES THAT UTILIZE THE REDIRECTED-SLIPSTREAM PRINCIPLE. Richard E. Kuhn. May 1956. 33p. diagrs., photos. (NACA TN 3692)

PRELIMINARY INVESTIGATION OF THE EFFECTIVENESS OF A SLIDING FLAP IN DEFLECTING A PROPELLER SLIPSTREAM DOWNWARD FOR VERTICAL TAKE-OFF. Richard E. Kuhn and Kenneth P. Spreemann. May 1956. 25p. diagrs., photo. (NACA TN 3693)

(1.5.6)
OPERATING CONDITIONS

THE EFFECTS OF COMPRESSIBILITY ON THE UPWASH AT THE PROPELLER PLANES OF A FOUR-ENGINE TRACTOR AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. Armando E. Lopez and Jerald K. Dickson. April 1953. 38p. diagrs., photos., tab. (NACA RM A53A30a)

THE EFFECT OF BLADE-SECTION CAMBER ON THE STALL-FLUTTER CHARACTERISTICS OF THREE NACA PROPELLERS AT ZERO ADVANCE. Arthur E. Allis and John M. Swihart. April 1953. 29p. diagrs., photo., tab. (NACA RM L53B17)

EXPERIMENTAL AND CALCULATED STATIC CHARACTERISTICS OF A TWO-BLADE NACA 10-(3)(062)-045 PROPELLER. John M. Swihart. March 1954. 20p. diagrs., photos., tab. (NACA RM L54A19)

FLUTTER OF THIN PROPELLER BLADES, INCLUDING EFFECTS OF MACH NUMBER, STRUCTURAL DAMPING, AND VIBRATORY-STRESS MEASUREMENTS NEAR THE FLUTTER BOUNDARIES. Harvey H. Hubbard, Marvin F. Burgess, and Maurice A. Sylvester. June 1956. 25p. diagrs., tab. (NACA TN 3707)

(1.5.7)
PROPELLER - SPINNER - COWL COMBINATIONS

AN INVESTIGATION OF A FOUR-BLADE SINGLE-ROTATION PROPELLER IN COMBINATION WITH AN NACA 1-SERIES D-TYPE COWLING AT MACH NUMBERS UP TO 0.83. Robert M. Reynolds, Robert I. Sammonds, and George C. Kenyon. April 1953. 71p. diagrs., photos. (NACA RM A53B06)

PRELIMINARY RESULTS OF AN INVESTIGATION OF THE EFFECTS OF SPINNER SHAPE ON THE CHARACTERISTICS OF AN NACA D-TYPE COWL BEHIND A THREE-BLADE PROPELLER, INCLUDING THE CHARACTERISTICS OF THE PROPELLER AT NEGATIVE THRUST. Robert M Reynolds. November 1953. 15p. diagrs., photo., tab. (NACA RM A53J02)

EFFECTS OF TWO SPINNER SHAPES ON THE PRESSURE RECOVERY IN AN NACA 1-SERIES D-TYPE COWL BEHIND A THREE-BLADE PROPELLER AT MACH NUMBERS UP TO 0.80. Ashley J. Molk and Robert M. Reynolds. March 1954. 34p. diagrs., photo., tab. (NACA RM A53L29a)

INVESTIGATION OF A THREE-BLADE PROPELLER IN COMBINATION WITH TWO DIFFERENT SPINNERS AND AN NACA D-TYPE COWL AT MACH NUMBERS UP TO 0.80. George C. Kenyon and Robert M. Reynolds. April 1954. 62p. diagrs., photos., tab. (NACA RM A54B18a)

(1.6)
Rotating Wings

(1.6.1)
THEORY

THE NORMAL COMPONENT OF THE INDUCED VELOCITY IN THE VICINITY OF A LIFTING ROTOR AND SOME EXAMPLES OF ITS APPLICATION. Walter Castles, Jr. and Jacob Henri De Leeuw, Georgia Institute of Technology. 1954. ii, 15p. diagrs., 3 tabs. (NACA Rept. 1184. Formerly TN 2912)

CHARTS FOR ESTIMATING TAIL-ROTOR CONTRIBUTION TO HELICOPTER DIRECTIONAL STABILITY AND CONTROL IN LOW-SPEED FLIGHT. Kenneth B. Amer and Alfred Gessow. 1955. ii, 22p. diagrs., photo., tabs. (NACA Rept. 1216. Supersedes TN 3156)

SUPPLEMENTARY CHARTS FOR ESTIMATING PERFORMANCE OF HIGH-PERFORMANCE HELICOPTERS. Robert J. Tapscott and Alfred Gessow. July 1955. 31p. diagrs. (NACA TN 3482)

CHARTS FOR ESTIMATING ROTOR-BLADE FLAPPING MOTION OF HIGH-PERFORMANCE HELICOPTERS. Robert J. Tapscott and Alfred Gessow. March 1956. 19p. diagrs. (NACA TN 3616)

NORMAL COMPONENT OF INDUCED VELOCITY IN THE VICINITY OF A LIFTING ROTOR WITH A NONUNIFORM DISK LOADING. Harry H. Heyson and S. Katzoff. April 1956. i, 45p. diagrs. (NACA TN 3690)

ANALYSIS AND COMPARISON WITH THEORY OF FLOW-FIELD MEASUREMENTS NEAR A LIFTING ROTOR IN THE LANGLEY FULL-SCALE TUNNEL. Harry H. Heyson. April 1956. 162p. diagrs., photos., tab. (NACA TN 3691)

(1.6.2)
EXPERIMENTAL STUDIES

GUST-TUNNEL INVESTIGATION OF THE EFFECT OF A SHARP-EDGE GUST ON THE FLAPWISE BLADE BENDING MOMENTS OF A MODEL HELICOPTER ROTOR. Domenic J. Maglieri and Thomas D. Reisert. August 1955. 24p. diagrs., photos. (NACA TN 3470)

(1.6.2.1)
POWER DRIVEN

DETERMINATION OF INFLOW DISTRIBUTIONS FROM EXPERIMENTAL AERODYNAMIC LOADING AND BLADE-MOTION DATA ON A MODEL HELICOPTER ROTOR IN HOVERING AND FORWARD FLIGHT. Gaetano Falabella, Jr., and John R. Meyer, Jr., Massachusetts Institute of Technology. November 1955. 184p. diagrs., photos., tab. (NACA TN 3492)

ANALYSIS AND COMPARISON WITH THEORY OF FLOW-FIELD MEASUREMENTS NEAR A LIFTING ROTOR IN THE LANGLEY FULL-SCALE TUNNEL. Harry H. Heyson. April 1956. 162p. diagrs., photos., tab. (NACA TN 3691)

(1.7) Aircraft

(1.7.1) AIRPLANES

A UNIFIED TWO-DIMENSIONAL APPROACH TO THE CALCULATION OF THREE-DIMENSIONAL HYPERSONIC FLOWS, WITH APPLICATION TO BODIES OF REVOLUTION. A. J. Eggers, Jr. and Raymond C. Savin. 1955. ii, 27p. diagrs., tab. (NACA Rept. 1249. Supersedes TN 2811)

(1.7.1.1) COMPONENTS IN COMBINATION

EFFECTS OF A SWEPTBACK HYDROFOIL ON THE FORCE AND LONGITUDINAL STABILITY CHARACTERISTICS OF A TYPICAL HIGH-SPEED AIRPLANE. Raymond B. Wood. December 2, 1948. 19p. diagrs., photo., tabs. (NACA RM L8I30a)

LARGE-SCALE FLIGHT MEASUREMENTS OF ZERO-LIFT DRAG AT MACH NUMBERS FROM 0.86 TO 1.5 OF A WING-BODY COMBINATION HAVING A 60° TRIANGULAR WING WITH NACA 65A003 SECTIONS. Robert L. Nelson. June 1, 1950. 10p. diagrs., photos., tab. (NACA RM L50D26)

LARGE-SCALE FLIGHT MEASUREMENTS OF ZERO-LIFT DRAG AT MACH NUMBERS FROM 0.8 TO 1.6 OF A WING-BODY COMBINATION HAVING AN UNSWEPT 4.5-PERCENT-THICK WING WITH MODIFIED HEXAGONAL SECTIONS. Eugene D. Schult. March 23, 1951. 14p. diagrs., photos., tab. (NACA RM L51A15)

INVESTIGATION OF THE EFFECT OF A NACELLE AT VARIOUS CHORDWISE AND VERTICAL POSITIONS ON THE AERODYNAMIC CHARACTERISTICS AT HIGH SUBSONIC SPEEDS OF A 45° SWEPTBACK WING WITH AND WITHOUT A FUSELAGE. H. Norman Silvers, Thomas J. King, Jr., and Thomas B. Pasteur, Jr. September 1951. 71p. diagrs., photos., 3 tabs. (NACA RM L51H16)

LONGITUDINAL STABILITY, TRIM, AND DRAG CHARACTERISTICS OF A ROCKET-PROPELLED MODEL OF AN AIRPLANE CONFIGURATION HAVING A 45° SWEPTBACK WING AND AN UNSWEPT HORIZONTAL TAIL. James H. Parks and Alan B. Kehlet. August 1952. 29p. diagrs., photos., tab. (NACA RM L52F05)

INVESTIGATION OF THE EFFECT OF CHORDWISE POSITIONING AND SHAPE OF AN UNDERWING NACELLE ON THE HIGH-SPEED AERODYNAMIC CHARACTERISTICS OF A 45° SWEPTBACK TAPERED-IN-THICKNESS-RATIO WING OF ASPECT RATIO 6. H. Norman Silvers and Thomas J. King, Jr. January 1953. 50p. diagrs. (NACA RM L52K25)

LARGE-SCALE FLIGHT MEASUREMENTS OF ZERO-LIFT DRAG AND LOW-LIFT LONGITUDINAL CHARACTERISTICS OF A DIAMOND-WING—BODY COMBINATION AT MACH NUMBERS FROM 0.725 TO 1.54. Harvey A. Wallskog and John D. Morrow. April 1953. 18p. diagrs., photo., tab. (NACA RM L53C17)

WIND-TUNNEL INVESTIGATION TO DETERMINE THE HORIZONTAL- AND VERTICAL-TAIL CONTRIBUTIONS TO THE STATIC LATERAL STABILITY CHARACTERISTICS OF A COMPLETE-MODEL SWEPT-WING CONFIGURATION AT HIGH SUBSONIC SPEEDS. James W. Wiggins, Richard E. Kuhn, and Paul G. Fournier. July 1953. 34p. diagrs., photo. (NACA RM L53E19)

LONGITUDINAL FLIGHT CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 59° SWEEPBACK WITH MODIFIED WING ROOTS. James A. Martin. August 1953. 25p. diagrs., photos., tab. (NACA RM L53E28)

THEORY OF WING-BODY DRAG AT SUPERSONIC SPEEDS. Robert T. Jones. September 1953. 11p. diagrs. (NACA RM A53H18a)

ARRANGEMENT OF FUSIFORM BODIES TO REDUCE THE WAVE DRAG AT SUPERSONIC SPEEDS. Morris D. Friedman and Doris Cohen. 1955. ii, 8p. diagrs. (NACA Rept. 1236. Supersedes RM A51I20; TN 3345)

THE WAVE DRAG OF ARBITRARY CONFIGURATIONS IN LINEARIZED FLOW AS DETERMINED BY AREAS AND FORCES IN OBLIQUE PLANES. Harvard Lomax. March 1955. 16p. (NACA RM A55A18)

A COMPARISON OF TWO METHODS FOR COMPUTING THE WAVE DRAG OF WING-BODY COMBINATIONS. Alberta Alksne. April 1955. 32p. diagrs. (NACA RM A55A06a)

A SPECIAL METHOD FOR FINDING BODY DISTORTIONS THAT REDUCE THE WAVE DRAG OF WING AND BODY COMBINATIONS AT SUPERSONIC SPEEDS. Harvard Lomax and Max. A. Heaslet. May 1955. 113p. diagrs., tab. (NACA RM A55B16)

GENERAL THEORY OF WAVE-DRAG REDUCTION FOR COMBINATIONS EMPLOYING QUASI-CYLINDRICAL BODIES WITH AN APPLICATION TO SWEPT-WING AND BODY COMBINATIONS. Jack N. Nielsen. June 1955. 74p. diagrs. (NACA RM A55B07)

WING-BODY COMBINATIONS WITH CERTAIN GEOMETRIC RESTRAINTS HAVING LOW ZERO-LIFT WAVE DRAG AT LOW SUPERSONIC MACH NUMBERS. Harvard Lomax. February 1956. 32p. diagrs. (NACA TN 3667)

SOME EFFECTS OF FUSELAGE FLEXIBILITY ON LONGITUDINAL STABILITY AND CONTROL. Bernard B. Klawans and Harold I. Johnson. April 1956. 42p. diagrs., tab. (NACA TN 3543)

PERFORMANCE AND OPERATIONAL STUDIES OF A FULL-SCALE JET-ENGINE THRUST REVERSER. Robert C. Kohl. April 1956. 38p. diagrs., photo. (NACA TN 3665)

(1.7.1.1.1)
Wing-Fuselage

THE HIGH-SPEED AERODYNAMIC EFFECTS OF MODIFICATIONS TO THE WING AND WING-FUSELAGE INTERSECTION OF AN AIRPLANE MODEL WITH THE WING SWEPT BACK 35°. Lee E. Boddy and Charles P. Morrill, Jr. February 18, 1948. 34p. diagrs., photos. (NACA RM A7J02)

LONGITUDINAL STABILITY CHARACTERISTICS OF A 42° SWEPTBACK WING AND TAIL COMBINATION AT A REYNOLDS NUMBER OF 6.8×10^6. Stanley H. Spooner and Albert P. Martina. July 22, 1948. 44p. diagrs., photos., 2 tabs. (NACA RM L8E12)

LONGITUDINAL-STABILITY INVESTIGATION OF HIGH-LIFT AND STALL-CONTROL DEVICES ON A 52° SWEPTBACK WING WITH AND WITHOUT FUSELAGE AND HORIZONTAL TAIL AT A REYNOLDS NUMBER OF 6.8×10^6. Gerald V. Foster and James E. Fitzpatrick. December 20, 1948. 41p. diagrs., photos., tabs. (NACA RM L8I08)

EFFECTS OF HIGH-LIFT AND STALL-CONTROL DEVICES, FUSELAGE, AND HORIZONTAL TAIL ON A WING SWEPT BACK 42° AT THE LEADING EDGE AND HAVING SYMMETRICAL CIRCULAR-ARC AIRFOIL SECTIONS AT A REYNOLDS NUMBER OF 6.9×10^6. Robert L. Woods and Stanley H. Spooner. April 20, 1949. 42p. diagrs., photos., tabs. (NACA RM L9B11)

A STUDY OF SEVERAL FACTORS AFFECTING THE STABILITY CONTRIBUTED BY A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS ON A SWEPTBACK-WING AIRPLANE MODEL. Gerald V. Foster and Roland F. Griner. October 28, 1949. 28p. diagrs., tab. (NACA RM L9H19)

AERODYNAMIC CHARACTERISTICS AND FLYING QUALITIES OF A TAILLESS TRIANGULAR-WING AIRPLANE CONFIGURATION AS OBTAINED FROM FLIGHTS OF ROCKET-PROPELLED MODELS AT TRANSONIC AND LOW SUPERSONIC SPEEDS. Grady L. Mitcham, Joseph E. Stevens, and Harry P. Norris. February 9, 1950. 67p. diagrs., photos., tabs. (NACA RM L9L07)

EFFECT OF WING-TANK LOCATION ON THE DRAG AND TRIM OF A SWEPT-WING MODEL AS MEASURED IN FLIGHT AT TRANSONIC SPEEDS. Clement J. Welsh and John D. Morrow. April 4, 1950. 18p. diagrs., photos. (NACA RM L50A19)

LARGE-SCALE FLIGHT MEASUREMENTS OF ZERO-LIFT DRAG AT MACH NUMBERS FROM 0.86 TO 1.5 OF A WING-BODY COMBINATION HAVING A 60° TRIANGULAR WING WITH NACA 65A003 SECTIONS. Robert L. Nelson. June 1, 1950. 10p. diagrs., photos., tab. (NACA RM L50D26)

LIFT AND PITCHING-MOMENT INTERFERENCE BETWEEN A POINTED CYLINDRICAL BODY AND TRIANGULAR WINGS OF VARIOUS ASPECT RATIOS AT MACH NUMBERS OF 1.50 AND 2.02. Jack N. Nielsen, Elliott D. Katzen, and Kenneth K. Tang. September 12, 1950. 53p. diagrs., photos., tabs. (NACA RM A50F06)

A TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. WING-FUSELAGE CONFIGURATION WITH A WING OF 45° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Robert S. Osborne. October 10, 1950. 49p. diagrs., photos. (NACA RM L50H08)

TRANSONIC FLIGHT TESTS TO COMPARE THE ZERO-LIFT DRAG OF UNDERSLUNG AND SYMMETRICAL NACELLES VARIED CHORDWISE AT 40 PERCENT SEMISPAN OF A 45° SWEPTBACK, TAPERED WING. William B. Pepper, Jr., and Sherwood Hoffman. October 25, 1950. 36p. diagrs., photos., tabs. (NACA RM L50G17a)

A TRANSONIC WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. WING-FUSELAGE CONFIGURATION HAVING A WING OF 35° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Beverly Z. Henry, Jr. November 15, 1950. 40p. diagrs., photo., tab. (NACA RM L50J09)

A TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. WING-FUSELAGE CONFIGURATION HAVING A WING OF 60° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Raymond B. Wood and Frank F. Fleming. January 24, 1951. 43p. diagrs., photo. (NACA RM L50J25)

AERODYNAMIC CHARACTERISTICS INCLUDING PRESSURE DISTRIBUTIONS OF A FUSELAGE AND THREE COMBINATIONS OF THE FUSELAGE WITH SWEPT-BACK WINGS AT HIGH SUBSONIC SPEEDS. Fred B. Sutton and Andrew Martin. February 6, 1951. 117p. diagrs., photos., tabs. (NACA RM A50J26a)

LOW-SPEED LONGITUDINAL AND WAKE AIR-FLOW CHARACTERISTICS AT A REYNOLDS NUMBER OF 6.0 x 10^6 OF A 52° SWEPTBACK WING EQUIPPED WITH VARIOUS SPANS OF LEADING-EDGE AND TRAILING-EDGE FLAPS, A FUSELAGE, AND A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS. Roland F. Griner and Gerald V. Foster. February 28, 1951. 66p. diagrs., photo., 3 tabs. (NACA RM L50K29)

A TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. WING-FUSELAGE CONFIGURATION HAVING A WING OF 0° SWEEPBACK, ASPECT RATIO 4.0, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Maurice S. Cahn and Carroll R. Bryan. March 6, 1951. 37p. diagrs., photos. (NACA RM L51A02)

LARGE-SCALE FLIGHT MEASUREMENTS OF ZERO-LIFT DRAG AT MACH NUMBERS FROM 0.8 TO 1.6 OF A WING-BODY COMBINATION HAVING AN UNSWEPT 4.5-PERCENT-THICK WING WITH MODIFIED HEXAGONAL SECTIONS. Eugene D. Schult. March 23, 1951. 14p. diagrs., photos., tab. (NACA RM L51A15)

DRAG INTERFERENCE BETWEEN A POINTED CYLINDRICAL BODY AND TRIANGULAR WINGS OF VARIOUS ASPECT RATIOS AT MACH NUMBERS OF 1.50 AND 2.02. Elliott D. Katzen and George E. Kaattari. May 23, 1951. 45p. diagrs., photos., tabs. (NACA RM A51C27)

COMPARISON OF ZERO-LIFT DRAGS DETERMINED BY FLIGHT TESTS AT TRANSONIC SPEEDS OF SYMMETRICALLY MOUNTED NACELLES IN VARIOUS SPANWISE POSITIONS ON A 45° SWEPTBACK WING AND BODY COMBINATION. William B. Pepper, Jr., and Sherwood Hoffman. May 23, 1951. 29p. diagrs., photos., tabs. (NACA RM L51D06)

COMPARISON OF ZERO-LIFT DRAG DETERMINED BY FLIGHT TESTS AT TRANSONIC SPEEDS OF PYLON, UNDERSLUNG, AND SYMMETRICALLY MOUNTED NACELLES AT 40 PERCENT SEMISPAN OF A 45° SWEPTBACK WING AND BODY COMBINATION. Sherwood Hoffman. June 1951. 18p. diagrs., photos., tabs. (NACA RM L51D26)

AERODYNAMIC CHARACTERISTICS OF FOUR WINGS OF SWEEPBACK ANGLES 0°, 35°, 45°, AND 60°, NACA 65A006 AIRFOIL SECTION, ASPECT RATIO 4, AND TAPER RATIO 0.6 IN COMBINATION WITH A FUSELAGE AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. Arvo A. Luoma. June 6, 1951. 59p. diagrs., photo., tab. (NACA RM L51D13)

LOW-SPEED LONGITUDINAL AND WAKE AIR-FLOW CHARACTERISTICS AT A REYNOLDS NUMBER OF 5.5 x 10^6 OF A CIRCULAR-ARC 52° SWEPTBACK WING WITH A FUSELAGE AND A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS. Gerald V. Foster and Roland F. Griner. June 19, 1951. 44p. diagrs., tabs. (NACA RM L51C30)

INVESTIGATION OF THE EFFECTS OF TWIST AND CAMBER ON THE AERODYNAMIC CHARACTERISTICS OF A 50° 38' SWEPTBACK WING OF ASPECT RATIO 2.98. TRANSONIC-BUMP METHOD. Kenneth P. Spreemann and William J. Alford, Jr. August 1951. 33p. diagrs., photos., tab. (NACA RM L51C16)

TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. ANALYSIS OF PRESSURE DISTRIBUTION OF WING-FUSELAGE CONFIGURATION HAVING A WING OF 45° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Donald L. Loving and Bruce B. Estabrooks. September 1951. 132p. diagrs., photos. (NACA RM L51F07)

COMPARISON OF ZERO-LIFT DRAGS DETERMINED BY FLIGHT TESTS AT TRANSONIC SPEEDS OF SYMMETRICALLY MOUNTED NACELLES IN VARIOUS CHORDWISE POSITIONS AT THE WING TIP OF A 45° SWEPTBACK WING AND BODY COMBINATION. William B. Pepper, Jr., and Sherwood Hoffman. September 1951. 16p. diagrs., photos. (NACA RM L51F13)

THE EFFECT ON ZERO-LIFT DRAG OF AN INDENTED FUSELAGE OR A THICKENED WING-ROOT MODIFICATION TO A 45° SWEPTBACK WING-BODY CONFIGURATION AS DETERMINED BY FLIGHT TESTS AT TRANSONIC SPEEDS. William B. Pepper. September 1951. 20p. diagrs., photos., 2 tabs. (NACA RM L51F15)

TRANSONIC FLIGHT TESTS TO DETERMINE ZERO-LIFT DRAG AND PRESSURE RECOVERY OF NACELLES LOCATED AT THE WING TIPS ON A 45° SWEPTBACK WING AND BODY COMBINATION. Sherwood Hoffman and William B. Pepper, Jr. January 1952. 21p. diagrs., photos., tabs. (NACA RM L51K02)

FLIGHT CALIBRATION OF ANGLE-OF-ATTACK AND SIDESLIP DETECTORS ON THE FUSELAGE OF A 35° SWEPT-WING FIGHTER AIRPLANE. Norman M. McFadden, George A. Rathert, Jr., and Richard S. Bray. February 1952. 26p. diagrs., photos. (NACA RM A52A04)

TRANSONIC FLIGHT TESTS TO COMPARE THE ZERO-LIFT DRAGS OF 45° SWEPTBACK WINGS OF ASPECT RATIO 3.55 AND 6.0 WITH AND WITHOUT NACELLES AT THE WING TIPS. Sherwood Hoffman and Richard C. Mapp, Jr. March 1952. 17p. diagrs., photos. (NACA RM L51L27)

WIND-TUNNEL INVESTIGATION OF THE AERODYNAMIC CHARACTERISTICS IN PITCH OF WING-FUSELAGE COMBINATIONS AT HIGH SUBSONIC SPEEDS. ASPECT-RATIO SERIES. Richard E. Kuhn and James W. Wiggins. April 1952. 42p. diagrs., photos., tab. (NACA RM L52A29)

(1) AERODYNAMICS

TRANSONIC DRAG CHARACTERISTICS AND PRESSURE DISTRIBUTION ON THE BODY OF A WING-BODY COMBINATION CONSISTING OF A BODY OF REVOLUTION OF FINENESS RATIO 12 AND A WING HAVING SWEEPBACK OF 45°, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTIONS. Max C. Kurbjun and Jim Rogers Thompson. April 1952. 28p. diagrs., photo., tabs. (NACA RM L52B12)

USE OF AN AERODYNAMICALLY PULSED ALL-MOVABLE HORIZONTAL TAIL TO OBTAIN LONGITUDINAL CHARACTERISTICS OF ROCKET-POWERED MODELS IN FREE FLIGHT AND SOME INITIAL RESULTS FROM AN ARROW-WING-BODY-TAIL CONFIGURATION. Warren Gillespie, Jr., and Albert E. Dietz. May 1952. 31p. diagrs., photos. (NACA RM L52C10)

AN INVESTIGATION THROUGHOUT THE SUBSONIC SPEED RANGE OF A FULL-SPAN AND A SEMI-SPAN MODEL OF A PLANE WING AND OF A CAMBERED AND TWISTED WING, ALL HAVING 45° OF SWEEPBACK. Harry H. Shibata, Angelo Bandettini, and Joseph Cleary. June 1952. 65p. diagrs., photos. (NACA RM A52D01)

A STUDY OF THE FLOW OVER A 45° SWEPTBACK WING-FUSELAGE COMBINATION AT TRANSONIC MACH NUMBERS. Richard T. Whitcomb and Thomas C. Kelly. June 1952. 60p. diagrs., photos. (NACA RM L52D01)

TRANSONIC FLIGHT TESTS TO COMPARE THE ZERO-LIFT DRAGS OF UNDERSLUNG NACELLES VARIED SPANWISE ON A 45° SWEPTBACK WING AND BODY COMBINATION. Sherwood Hoffman. July 1952. 16p. diagrs., photos. (NACA RM L52D04a)

WIND-TUNNEL INVESTIGATION OF THE AERODYNAMIC CHARACTERISTICS IN PITCH OF WING-FUSELAGE COMBINATIONS AT HIGH-SUBSONIC SPEEDS. SWEEP SERIES. James W. Wiggins and Richard E. Kuhn. July 1952. 41p. diagrs., photos. (NACA RM L52D18)

EFFECT OF FUSELAGE INTERFERENCE ON THE DAMPING IN ROLL OF DELTA WINGS OF ASPECT RATIO 4 IN THE MACH NUMBER RANGE BETWEEN 0.6 AND 1.6 AS DETERMINED WITH ROCKET-PROPELLED VEHICLES. William M. Bland, Jr. July 1952. 13p. diagrs., photos. (NACA RM L52E13)

TRANSONIC FLIGHT TESTS TO DETERMINE THE EFFECT OF THICKNESS RATIO AND PLAN-FORM MODIFICATION ON THE ZERO-LIFT DRAG OF A 45° SWEPTBACK WING. William B. Pepper, Jr., and Sherwood Hoffman. August 1952. 24p. diagrs., photos., tabs. (NACA RM L52F02a)

FREE-FLIGHT TESTS AT MACH NUMBERS FROM 0.8 TO 1.4 TO DETERMINE THE EFFECT ON ZERO-LIFT DRAG OF INCREASING THE LEADING-EDGE BLUNTNESS OF A 45° SWEPTBACK WING HAVING AN NACA 65A009 AIRFOIL. William B. Pepper, Jr. August 1952. 15p. diagrs., photos., tabs. (NACA RM L52F30)

PRELIMINARY RESULTS OF HORIZONTAL-TAIL LOAD MEASUREMENTS OF THE BELL X-5 RESEARCH AIRPLANE. John T. Rogers and Angel H. Dunn. August 15, 1952. 22p. diagrs., photos., tabs. (NACA RM L52G14)

THE LONGITUDINAL CHARACTERISTICS AT MACH NUMBERS UP TO 0.92 OF A CAMBERED AND TWISTED WING HAVING 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. George G. Edwards, Bruce E. Tinling, and Arthur C. Ackerman. September 1952. 71p. diagrs., photos., tab. (NACA RM A52F18)

A STUDY OF THE ZERO-LIFT DRAG-RISE CHARACTERISTICS OF WING-BODY COMBINATIONS NEAR THE SPEED OF SOUND. Richard T. Whitcomb. September 1952. 41p. diagrs., photos., 3 tabs. (NACA RM L52H08)

LONGITUDINAL-CONTROL EFFECTIVENESS AND DOWNWASH CHARACTERISTICS AT TRANSONIC SPEEDS OF A 1/30-SCALE SEMISPAN MODEL OF THE BELL X-5 AIRPLANE AS DETERMINED BY THE NACA WING-FLOW METHOD. Norman S. Silsby and Garland J. Morris. January 1953. 48p. diagrs., photos., 2 tabs. (NACA RM L52K12)

WIND-TUNNEL INVESTIGATION OF THE STATIC LATERAL STABILITY CHARACTERISTICS OF WING-FUSELAGE COMBINATIONS AT HIGH SUBSONIC SPEEDS. ASPECT-RATIO SERIES. Paul G. Fournier and Andrew L. Byrnes, Jr. February 1953. 26p. diagrs., photos. (NACA RM L52L18)

LOW-SPEED LONGITUDINAL CHARACTERISTICS OF AN UNSWEPT HEXAGONAL WING WITH AND WITHOUT A FUSELAGE AND A HORIZONTAL TAIL LOCATED AT VARIOUS POSITIONS AT REYNOLDS NUMBERS FROM 2.8×10^6 TO 7.6×10^6. Gerald V. Foster, Ernst F. Mollenberg, and Robert L. Woods. February 26, 1953. 63p. diagrs., photos., 3 tabs. (NACA RM L52L11b)

PRESSURE DISTRIBUTION AT MACH NUMBERS UP TO 0.90 ON A CAMBERED AND TWISTED WING HAVING 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10, INCLUDING THE EFFECTS OF FENCES. Frederick W. Boltz and Harry H. Shibata. March 1953. 133p. diagrs., photos., tabs. (NACA RM A52K20)

COMPARISON OF MEASURED AND PREDICTED INDICATED ANGLES OF ATTACK NEAR THE FUSELAGES OF A TRIANGULAR-WING WIND-TUNNEL MODEL AND A SWEPT-WING FIGHTER AIRPLANE IN FLIGHT. Norman M. McFadden, John L. McCloud, III, and Harry A. James. March 1953. 13p. diagrs. (NACA RM A53A15)

THE EFFECTS OF COMPRESSIBILITY ON THE UPWASH AT THE PROPELLER PLANES OF A FOUR-ENGINE TRACTOR AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. Armando E. Lopez and Jerald K. Dickson. April 1953. 38p. diagrs., photos., tab. (NACA RM A53A30a)

LARGE-SCALE FLIGHT MEASUREMENTS OF ZERO-LIFT DRAG AND LOW-LIFT LONGITUDINAL CHARACTERISTICS OF A DIAMOND-WING—BODY COMBINATION AT MACH NUMBERS FROM 0.725 TO 1.54. Harvey A. Wallskog and John D. Morrow. April 1953. 18p. diagrs., photo., tab. (NACA RM L53C17)

EXPERIMENTAL INVESTIGATION OF THE EFFECTS OF PLAN-FORM TAPER ON THE AERODYNAMIC CHARACTERISTICS OF SYMMETRICAL UNSWEPT WINGS OF VARYING ASPECT RATIO. Edwin C. Allen. May 1953. 53p. diagrs., photos., tab. (NACA RM A53C19)

LOW-SPEED INVESTIGATION OF THE AERODYNAMIC, CONTROL, AND HINGE-MOMENT CHARACTERISTICS OF TWO TYPES OF CONTROLS ON A DELTA-WING-FUSELAGE MODEL WITH AND WITHOUT NACELLES. William I. Scallion. May 1953. 47p. diagrs., photos., tabs. (NACA RM L53C18)

FREE-FALL MEASUREMENTS OF THE EFFECTS OF WING-BODY INTERFERENCE ON THE TRANSONIC DRAG CHARACTERISTICS OF SWEPT-WING-SLENDER-BODY CONFIGURATIONS. Max C. Kurbjun and Jim Rogers Thompson. May 1953. 34p. diagrs., photos., tabs. (NACA RM L53C31)

LONGITUDINAL STABILITY AND WAKE-FLOW CHARACTERISTICS OF A TWISTED AND CAMBERED WING-FUSELAGE COMBINATION OF 45° SWEEPBACK AND ASPECT RATIO 8 WITH A HORIZONTAL TAIL AND STALL-CONTROL DEVICES AT A REYNOLDS NUMBER OF 4.0×10^6. Gerald V. Foster. June 1953. 51p. diagrs., photos., tab. (NACA RM L53D08)

WIND-TUNNEL INVESTIGATION OF THE AERODYNAMIC CHARACTERISTICS IN PITCH OF WING-FUSELAGE COMBINATIONS AT HIGH SUBSONIC SPEEDS. TAPER-RATIO SERIES. Thomas J. King, Jr. and Thomas B. Pasteur, Jr. June 1953. 37p. diagrs., photos., tab. (NACA RM L53E20)

WIND-TUNNEL INVESTIGATION OF THE EFFECTS OF GEOMETRIC DIHEDRAL ON THE AERODYNAMIC CHARACTERISTICS IN PITCH AND SIDESLIP OF AN UNSWEPT- AND A 45° SWEPTBACK-WING-FUSELAGE COMBINATION AT HIGH SUBSONIC SPEEDS. Richard E. Kuhn and John W. Draper. July 1953. 41p. diagrs., photos. (NACA RM L53F09)

THE EFFECTS OF LEADING-EDGE EXTENSIONS, A TRAILING-EDGE EXTENSION, AND A FENCE ON THE STATIC LONGITUDINAL STABILITY OF A WING-FUSELAGE-TAIL COMBINATION HAVING A WING WITH 35° OF SWEEPBACK AND AN ASPECT RATIO OF 4.5. Ralph Selan and Angelo Bandettini. August 1953. 81p. diagrs., photos., tabs. (NACA RM A53E12)

THE LATERAL CONTROL CHARACTERISTICS OF CONSTANT-PERCENT-CHORD TRAILING-EDGE ELEVONS ON A POINTED WING OF ASPECT RATIO 2 AT MACH NUMBERS UP TO 0.95. Verlin D. Reed and Donald W. Smith. August 1953. 105p. diagrs., photo., tabs. (NACA RM A53F03)

WIND-TUNNEL INVESTIGATION OF THE EFFECTS OF STEADY ROLLING ON THE AERODYNAMIC LOADING CHARACTERISTICS OF A 45° SWEPTBACK WING AT HIGH SUBSONIC SPEEDS. James W. Wiggins and Richard E. Kuhn. November 1953. 22p. diagrs., photos. (NACA RM L53J01a)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF THE EFFECT OF VARYING THE RATIO OF BODY DIAMETER TO WING SPAN FROM 0.1 TO 0.8 ON THE AERODYNAMIC CHARACTERISTICS IN PITCH OF A 45° SWEPTBACK-WING—BODY COMBINATION. Harold S. Johnson. November 1953. 32p. diagrs., photo., tab. (NACA RM L53J09a)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF THE EFFECTS OF CHORDWISE WING FENCES AND HORIZONTAL-TAIL POSITION ON THE STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF AN AIRPLANE MODEL WITH A 35° SWEPTBACK WING. M. J. Queijo, Byron M. Jaquet, and Walter D. Wolhart. 1954. ii, 29p. diagrs., photos., tab. (NACA Rept. 1203. Supersedes RM L50K07; RM L51H17)

THE EFFECTS OF HORIZONTAL-TAIL HEIGHT AND A PARTIAL-SPAN LEADING-EDGE EXTENSION ON THE STATIC LONGITUDINAL STABILITY OF A WING-FUSELAGE-TAIL COMBINATION HAVING A SWEPTBACK WING. Angelo Bandettini and Ralph Selan. March 1954. 54p. diagrs., photos., 2 tabs. (NACA RM A53J07)

PRELIMINARY INVESTIGATION AT SUBSONIC AND TRANSONIC SPEEDS OF THE AERODYNAMIC CHARACTERISTICS OF A BIPLANE COMPOSED OF A SWEPTBACK AND A SWEPTFORWARD WING JOINED AT THE TIPS. Jones F. Cahill and Dexter H. Stead. March 1954. 19p. diagrs., photos. (NACA RM L53L24b)

DISTRIBUTION OF LIFT AND PITCHING MOMENT BETWEEN WING AND FUSELAGE AND EFFECTS OF WING FLEXIBILITY AND DIVE BRAKE ON A 1/30-SCALE SEMISPAN MODEL OF THE BELL X-5 AIRPLANE AT TRANSONIC SPEEDS AS DETERMINED BY THE NACA WING-FLOW METHOD. Garland J. Morris and Norman S. Silsby. March 1954. 46p. diagrs., photos., tab. (NACA RM L54A11)

ON SLENDER-BODY THEORY AT TRANSONIC SPEEDS. Keith C. Harder and E. B. Klunker. March 1954. 12p. (NACA RM L54A29a)

EFFECTS OF OPERATING PROPELLERS ON THE WING-SURFACE PRESSURES OF A FOUR-ENGINE TRACTOR AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK. Carl D. Kolbe and Frederick W. Boltz. April 1954. 133p. diagrs., photo., 19 tabs. (NACA RM A53L29)

SUBSONIC INVESTIGATION OF EFFECTS OF BODY INDENTATION ON ZERO-LIFT DRAG CHARACTERISTICS OF A 45° SWEPTBACK WING-BODY COMBINATION WITH NATURAL AND FIXED BOUNDARY-LAYER TRANSITION THROUGH A RANGE OF REYNOLDS NUMBER FROM 1×10^6 TO 8×10^6. Gene J. Bingham and Albert L. Braslow. April 1954. 10p. diagrs., photos. (NACA RM L54B18a)

EFFECTS OF HIGH-LIFT DEVICES AND HORIZONTAL-TAIL LOCATION ON THE LOW-SPEED CHARACTERISTICS OF A LARGE-SCALE 45° SWEPT-WING AIRPLANE CONFIGURATION. Ralph L. Maki and Ursel R. Embry. August 1954. 46p. diagrs., photo., tabs. (NACA RM A54E10)

APPLICATION OF WING-BODY THEORY TO DRAG REDUCTION AT LOW SUPERSONIC SPEEDS. Barrett S. Baldwin, Jr., and Robert R. Dickey. January 1955. 42p. (NACA RM A54J19)

DOWNWASH SURVEY BEHIND TWO LOW-ASPECT-RATIO VARIABLE-INCIDENCE WINGS IN COMBINATION WITH THREE DIFFERENT SIZE FUSELAGES AT A MACH NUMBER OF 0.25. Edward J. Hopkins and Norman E. Sorensen. March 1955. 54p. diagrs., photos., tab. (NACA RM A55A07)

GENERAL THEORY OF WAVE-DRAG REDUCTION FOR COMBINATIONS EMPLOYING QUASI-CYLINDRICAL BODIES WITH AN APPLICATION TO SWEPT-WING AND BODY COMBINATIONS. Jack N. Nielsen. June 1955. 74p. diagrs. (NACA RM A55B07)

FLIGHT MEASUREMENTS OF HORIZONTAL-TAIL LOADS ON THE BELL X-5 RESEARCH AIRPLANE AT A SWEEP ANGLE OF 58.7°. Robert D. Reed. July 1955. 19p. diagrs., photo., tab. (NACA RM H55E20a)

THE EFFECTIVENESS OF WING VORTEX GENERATORS IN IMPROVING THE MANEUVERING CHARACTERISTICS OF A SWEPT-WING AIRPLANE AT TRANSONIC SPEEDS. Norman M. McFadden, George A. Rathert, Jr., and Richard S. Bray. September 1955. 43p. diagrs., photos., tab. (NACA TN 3523. Supersedes RM A51J18)

SUMMARY OF RESULTS OBTAINED BY TRANSONIC-BUMP METHOD ON EFFECTS OF PLAN FORM AND THICKNESS ON LIFT AND DRAG CHARACTERISTICS OF WINGS AT TRANSONIC SPEEDS. Edward C. Polhamus. November 1955. 33p. diagrs., tab. (NACA TN 3469. Supersedes RM L51H30)

MINIMUM WAVE DRAG FOR ARBITRARY ARRANGEMENTS OF WINGS AND BODIES. Robert T. Jones. February 1956. 11p. diagrs. (NACA TN 3530)

REDUCTION OF WAVE DRAG OF WING-BODY COMBINATIONS AT SUPERSONIC SPEEDS THROUGH BODY DISTORTIONS. William C. Pitts. April 1956. 9p. diagrs. (NACA RM A56B10)

AN ANALYSIS OF ESTIMATED AND EXPERIMENTAL TRANSONIC DOWNWASH CHARACTERISTICS AS AFFECTED BY PLAN FORM AND THICKNESS FOR WING AND WING-FUSELAGE CONFIGURATIONS. Joseph Weil, George S. Campbell and Margaret S. Diederich. April 1956. 92p. diagrs., photos., tabs. (NACA TN 3628. Supersedes RM L52I22)

RESULTS OF A FLIGHT INVESTIGATION TO DETERMINE THE ZERO-LIFT DRAG CHARACTERISTICS OF A 60° DELTA WING WITH NACA 65-006 AIRFOIL SECTION AND VARIOUS DOUBLE-WEDGE SECTIONS AT MACH NUMBERS FROM 0.7 TO 1.6. Clement J. Welsh. April 1956. 13p. diagrs., photo. (NACA TN 3650. Supersedes RM L50F01)

INVESTIGATION AT HIGH SUBSONIC SPEEDS OF A BODY-CONTOURING METHOD FOR ALLEVIATING THE ADVERSE INTERFERENCE AT THE ROOT OF A SWEPTBACK WING. John B. McDevitt and William M. Haire. April 1956. 38p. diagrs., photos. (NACA TN 3672. Supersedes RM A54A22)

THEORETICAL PRESSURE DISTRIBUTIONS FOR SOME SLENDER WING-BODY COMBINATIONS AT ZERO LIFT. Paul F. Byrd. April 1956. 39p. diagrs. (NACA TN 3674. Supersedes RM A54J07)

STATIC LONGITUDINAL AND LATERAL STABILITY CHARACTERISTICS AT LOW SPEED OF UNSWEPT-MIDWING MODELS HAVING WINGS WITH AN ASPECT RATIO OF 2, 4, OR 6. Walter D. Wolhart and David F. Thomas, Jr. May 1956. 41p. diagrs., photos., tabs. (NACA TN 3649)

COMPARISON BETWEEN EXPERIMENTAL AND PREDICTED DOWNWASH AT A MACH NUMBER OF 0.25 BEHIND A WING-BODY COMBINATION HAVING A TRIANGULAR WING OF ASPECT RATIO 2.0. Norman E. Sorensen and Edward J. Hopkins. May 1956. 29p. diagrs., photos. (NACA TN 3720)

(1.7.1.1.2) Wing-Nacelle

EXPERIMENTAL INVESTIGATION OF VARIOUS WING-MOUNTED EXTERNAL STORES ON A WING-FUSELAGE COMBINATION HAVING A SWEPTBACK WING OF INVERSE TAPER RATIO. Kenneth P. Spreemann and H. Norman Silvers. September 15, 1950. 29p. diagrs., photos., tab. (NACA RM L9J06)

TRANSONIC FLIGHT TESTS TO COMPARE THE ZERO-LIFT DRAG OF UNDERSLUNG AND SYMMETRICAL NACELLES VARIED CHORDWISE AT 40 PERCENT SEMISPAN OF A 45° SWEPTBACK, TAPERED WING. William B. Pepper, Jr., and Sherwood Hoffman. October 25, 1950. 36p. diagrs., photos., tabs. (NACA RM L50G17a)

INVESTIGATION OF THE EFFECTS OF GEOMETRIC CHANGES IN AN UNDERWING PYLON-SUSPENDED EXTERNAL-STORE INSTALLATION ON THE AERODYNAMIC CHARACTERISTICS OF A 45° SWEPTBACK WING AT HIGH SUBSONIC SPEEDS. Kenneth P. Spreemann and William J. Alford, Jr. March 5, 1951. 91p. diagrs., photos., tabs. (NACA RM L50L12)

COMPARISON OF ZERO-LIFT DRAGS DETERMINED BY FLIGHT TESTS AT TRANSONIC-SPEEDS OF SYMMETRICALLY MOUNTED NACELLES IN VARIOUS SPANWISE POSITIONS ON A 45° SWEPTBACK WING AND BODY COMBINATION. William B. Pepper, Jr., and Sherwood Hoffman. May 23, 1951. 29p. diagrs., photos., tabs. (NACA RM L51D06)

COMPARISON OF ZERO-LIFT DRAG DETERMINED BY FLIGHT TESTS AT TRANSONIC SPEEDS OF PYLON, UNDERSLUNG, AND SYMMETRICALLY MOUNTED NACELLES AT 40 PERCENT SEMISPAN OF A 45° SWEPTBACK WING AND BODY COMBINATION. Sherwood Hoffman. June 1951. 18p. diagrs., photos., tabs. (NACA RM L51D26)

COMPARISON OF ZERO-LIFT DRAGS DETERMINED BY FLIGHT TESTS AT TRANSONIC SPEEDS OF SYMMETRICALLY MOUNTED NACELLES IN VARIOUS CHORDWISE POSITIONS AT THE WING TIP OF A 45° SWEPTBACK WING AND BODY COMBINATION. William B. Pepper, Jr., and Sherwood Hoffman. September 1951. 16p. diagrs., photos. (NACA RM L51F13)

TRANSONIC FLIGHT TESTS TO DETERMINE ZERO-LIFT DRAG AND PRESSURE RECOVERY OF NACELLES LOCATED AT THE WING TIPS ON A 45° SWEPTBACK WING AND BODY COMBINATION. Sherwood Hoffman and William B. Pepper, Jr. January 1952. 21p. diagrs., photos., tabs. (NACA RM L51K02)

TRANSONIC FLIGHT TESTS TO COMPARE THE ZERO-LIFT DRAGS OF 45° SWEPTBACK WINGS OF ASPECT RATIO 3.55 AND 6.0 WITH AND WITHOUT NACELLES AT THE WING TIPS. Sherwood Hoffman and Richard C. Mapp. Jr. March 1952. 17p. diagrs., photos. (NACA RM L51L27)

TRANSONIC FLIGHT TESTS TO COMPARE THE ZERO-LIFT DRAGS OF UNDERSLUNG NACELLES VARIED SPANWISE ON A 45° SWEPTBACK WING AND BODY COMBINATION. Sherwood Hoffman. July 1952. 16p. diagrs., photos. (NACA RM L52D04a)

THE EFFECTS OF COMPRESSIBILITY ON THE UPWASH AT THE PROPELLER PLANES OF A FOUR-ENGINE TRACTOR AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. Armando E. Lopez and Jerald K. Dickson. April 1953. 38p. diagrs., photos., tab. (NACA RM A53A30a)

LOW-SPEED INVESTIGATION OF THE AERODYNAMIC, CONTROL, AND HINGE-MOMENT CHARACTERISTICS OF TWO TYPES OF CONTROLS ON A DELTA-WING-FUSELAGE MODEL WITH AND WITHOUT NACELLES. William I. Scallion. May 1953. 47p. diagrs., photos., tabs. (NACA RM L53C18)

THE EFFECTS OF NACELLES AND OF EXTENDED SPLIT FLAPS ON THE LONGITUDINAL CHARACTERISTICS OF A WING-FUSELAGE-TAIL COMBINATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. Bruce E. Tinling and Armando E. Lopez. June 1953. 47p. diagrs., tab. (NACA RM A53D06)

THE RESULTS OF WIND-TUNNEL TESTS AT LOW SPEEDS OF A FOUR-ENGINE PROPELLER-DRIVEN AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. George G. Edwards, Donald A. Buell, and Jerald K. Dickson. December 1953. 121p. diagrs., photo., tabs. (NACA RM A53I28)

THE EFFECTS OF OPERATING PROPELLERS ON THE LONGITUDINAL CHARACTERISTICS AT HIGH SUBSONIC SPEEDS OF A FOUR-ENGINE TRACTOR AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. Fred B. Sutton and Fred A. Demele. January 1954. 106p. diagrs., photo., 11 tabs. (NACA RM A53J23)

EFFECTS OF OPERATING PROPELLERS ON THE WING-SURFACE PRESSURES OF A FOUR-ENGINE TRACTOR AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK. Carl D. Kolbe and Frederick W. Boltz. April 1954. 133p. diagrs., photo., 19 tabs. (NACA RM A53L29)

STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A COMPOSITE-PLAN-FORM WING MODEL INCLUDING SOME COMPARISONS WITH A 45° SWEPTBACK WING AT TRANSONIC SPEEDS. Walter D. Wolhart. August 1954. 36p. diagrs., photo., tabs. (NACA RM L54F24)

ANALYSIS OF WIND-TUNNEL TESTS AT LOW SPEEDS OF A FOUR-ENGINE PROPELLER-DRIVEN AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK. George G. Edwards and Donald A. Buell. October 1954. 137p. diagrs., photos., 2 tabs. (NACA RM A54F14)

APPLICATION OF WING-BODY THEORY TO DRAG REDUCTION AT LOW SUPERSONIC SPEEDS. Barrett S. Baldwin, Jr., and Robert R. Dickey. January 1955. 42p. (NACA RM A54J19)

(1.7.1.1.3)
Tail-Wing and Fuselage

LONGITUDINAL STABILITY CHARACTERISTICS OF A 42° SWEPTBACK WING AND TAIL COMBINATION AT A REYNOLDS NUMBER OF 6.8 x 10^6. Stanley H. Spooner and Albert P. Martina. July 22, 1948. 44p. diagrs., photos., 2 tabs. (NACA RM L8E12)

LONGITUDINAL-STABILITY INVESTIGATION OF HIGH-LIFT AND STALL-CONTROL DEVICES ON A 52° SWEPTBACK WING WITH AND WITHOUT FUSELAGE AND HORIZONTAL TAIL AT A REYNOLDS NUMBER OF 6.8 x 10^6. Gerald V. Foster and James E. Fitzpatrick. December 20, 1948. 41p. diagrs., photos., tabs. (NACA RM L8I08)

EFFECTS OF HIGH-LIFT AND STALL-CONTROL DEVICES, FUSELAGE, AND HORIZONTAL TAIL ON A WING SWEPT BACK 42° AT THE LEADING EDGE AND HAVING SYMMETRICAL CIRCULAR-ARC AIRFOIL SECTIONS AT A REYNOLDS NUMBER OF 6.9 x 10^6. Robert L. Woods and Stanley H. Spooner. April 20, 1949. 42p. diagrs., photos., tabs. (NACA RM L9B11)

WIND-TUNNEL INVESTIGATION OF A TAILLESS TRIANGULAR-WING FIGHTER AIRCRAFT AT MACH NUMBERS FROM 0.5 TO 1.5. Leslie F. Lawrence and James L. Summers. June 24, 1949. 56p. diagrs., photos., tab. (NACA RM A9B16)

AERODYNAMIC STUDY OF A WING-FUSELAGE COMBINATION EMPLOYING A WING SWEPT BACK 63°. - AERODYNAMIC CHARACTERISTICS IN SIDESLIP OF A LARGE-SCALE MODEL HAVING A 63° SWEPT-BACK VERTICAL TAIL. Gerald M. McCormack. October 7, 1949. 26p. diagrs., photos. (NACA RM A9F14)

A STUDY OF SEVERAL FACTORS AFFECTING THE STABILITY CONTRIBUTED BY A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS ON A SWEPTBACK-WING AIRPLANE MODEL. Gerald V. Foster and Roland F. Griner. October 28, 1949. 28p. diagrs., tab. (NACA RM L9H19)

INVESTIGATION OF A THIN WING OF ASPECT RATIO 4 IN THE AMES 12-FOOT PRESSURE WIND TUNNEL. V - STATIC LONGITUDINAL STABILITY AND CONTROL THROUGHOUT THE SUBSONIC SPEED RANGE OF A SEMISPAN MODEL OF A SUPERSONIC AIRPLANE. Ben H. Johnson, Jr., and Francis W. Rollins. December 8, 1949. 130p. diagrs., photos. (NACA RM A9I01)

HORIZONTAL-TAIL EFFECTIVENESS AND DOWNWASH SURVEYS FOR TWO 47.7° SWEPTBACK WING-FUSELAGE COMBINATIONS WITH ASPECT RATIOS OF 5.1 AND 6.0 AT A REYNOLDS NUMBER OF 6.0×10^6. Reino J. Salmi. January 12, 1951. 65p. diagrs., photos., 2 tabs. (NACA RM L50K06)

LOW-SPEED LONGITUDINAL AND WAKE AIRFLOW CHARACTERISTICS AT A REYNOLDS NUMBER OF 6.0×10^6 OF A 52° SWEPTBACK WING EQUIPPED WITH VARIOUS SPANS OF LEADING-EDGE AND TRAILING-EDGE FLAPS, A FUSELAGE, AND A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS. Roland F. Griner and Gerald V. Foster. February 28, 1951. 66p. diagrs., photo., 3 tabs. (NACA RM L50K29)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 2 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL- LONGITUDINAL CHARACTERISTICS. David Graham and David G. Koenig. April 23, 1951. 35p. diagrs., photo., 3 tabs. (NACA RM A51B21)

LOW-SPEED LONGITUDINAL AND WAKE AIRFLOW CHARACTERISTICS AT A REYNOLDS NUMBER OF 5.5×10^6 OF A CIRCULAR-ARC 52° SWEPTBACK WING WITH A FUSELAGE AND A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS. Gerald V. Foster and Roland F. Griner. June 19, 1951. 44p. diagrs., tabs. (NACA RM L51C30)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 4 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LONGITUDINAL CHARACTERISTICS. David Graham and David G. Koenig. October 1951. 27p. diagrs., photo., 4 tabs. (NACA RM A51H10a)

THE STATIC LONGITUDINAL CHARACTERISTICS AT MACH NUMBERS UP TO 0.95 OF A TRIANGULAR-WING CANARD MODEL HAVING A TRIANGULAR CONTROL. Jack D. Stephenson and Ralph Selan. December 1951. 72p. diagrs., photo. (NACA RM A51I07)

EFFECT OF VERTICAL LOCATION OF A HORIZONTAL TAIL ON THE STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A 45° SWEPTBACK-WING - FUSELAGE COMBINATION OF ASPECT RATIO 8 AT A REYNOLDS NUMBER OF 4.0×10^6. Reino J. Salmi and William A. Jacques. January 1952. 42p. diagrs., photos. (NACA RM L51J08)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 2 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LATERAL CHARACTERISTICS. David Graham and David G. Koenig. February 1952. 38p. diagrs., 2 tabs. (NACA RM A51L03)

USE OF AN AERODYNAMICALLY PULSED ALL-MOVABLE HORIZONTAL TAIL TO OBTAIN LONGITUDINAL CHARACTERISTICS OF ROCKET-POWERED MODELS IN FREE FLIGHT AND SOME INITIAL RESULTS FROM AN ARROW-WING-BODY-TAIL CONFIGURATION. Warren Gillespie, Jr., and Albert E. Dietz. May 1952. 31p. diagrs., photos. (NACA RM L52C10)

EFFECT OF CAMBER AND TWIST ON THE STABILITY CHARACTERISTICS OF MODELS HAVING A 45° SWEPT WING AS DETERMINED BY THE FREE-FALL METHOD AT TRANSONIC SPEEDS. Maurice D. White. August 1952. 35p. diagrs., photos., tab. (NACA RM A52F16)

LONGITUDINAL STABILITY, TRIM, AND DRAG CHARACTERISTICS OF A ROCKET-PROPELLED MODEL OF AN AIRPLANE CONFIGURATION HAVING A 45° SWEPTBACK WING AND AN UNSWEPT HORIZONTAL TAIL. James H. Parks and Alan B. Kehlet. August 1952. 29p. diagrs., photos., tab. (NACA RM L52F05)

INVESTIGATION OF THE LOW-SPEED AERODYNAMIC CHARACTERISTICS OF A VARIABLE-SWEEP AIRPLANE MODEL WITH A WING HAVING PARTIAL-SPAN CAMBERED-LEADING-EDGE MODIFICATIONS. Robert E. Becht and Andrew L. Byrnes, Jr. September 1952. 47p. diagrs., photos. (NACA RM L52G08a)

THE EFFECTS OF SWEEPBACK ON LONGITUDINAL CHARACTERISTICS OF A 1/30-SCALE SEMISPAN MODEL OF THE BELL X-5 AIRPLANE AS DETERMINED FROM NACA WING-FLOW TESTS AT TRANSONIC SPEEDS. Joseph J. Kolnick and Robert M. Kennedy. November 1952. 48p. diagrs., photos., tab. (NACA RM L52I23)

THE LONGITUDINAL CHARACTERISTICS AT MACH NUMBERS UP TO 0.9 OF A WING-FUSELAGE-TAIL COMBINATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. Bruce E. Tinling. December 1952. 41p. diagrs., photo., tab. (NACA RM A52I19)

EFFECTS OF TWIST AND CAMBER, FENCES, AND HORIZONTAL-TAIL HEIGHT ON THE LOW-SPEED LONGITUDINAL STABILITY CHARACTERISTICS OF A WING-FUSELAGE COMBINATION WITH A 45° SWEPTBACK WING OF ASPECT RATIO 8 AT A REYNOLDS NUMBER OF 4.0×10^6. Gerald V. Foster. December 1952. 30p. diagrs., photo. (NACA RM L52J03)

LONGITUDINAL-CONTROL EFFECTIVENESS AND DOWNWASH CHARACTERISTICS AT TRANSONIC SPEEDS OF A 1/30-SCALE SEMISPAN MODEL OF THE BELL X-5 AIRPLANE AS DETERMINED BY THE NACA WING-FLOW METHOD. Norman S. Silsby and Garland J. Morris. January 1953. 48p. diagrs., photos., 2 tabs. (NACA RM L52K12)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE MODEL WITH AN ASPECT RATIO 4 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - HIGH-LIFT DEVICES AND LATERAL CONTROLS. Ralph W. Franks. February 1953. 45p. diagrs., photo., 2 tabs. (NACA RM A52K13)

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LOW-SPEED LONGITUDINAL CHARACTERISTICS OF AN UNSWEPT HEXAGONAL WING WITH AND WITHOUT A FUSELAGE AND A HORIZONTAL TAIL LOCATED AT VARIOUS POSITIONS AT REYNOLDS NUMBERS FROM 2.8×10^6 TO 7.6×10^6. Gerald V. Foster, Ernst F. Mollenberg and Robert L. Woods. February 26, 1953. 63p. diagrs., photos., 3 tabs. (NACA RM L52L11b)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 3 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LONGITUDINAL AND LATERAL CHARACTERISTICS. David G. Koenig. April 1953. 61p. diagrs., photos., 4 tabs. (NACA RM A52L15)

INVESTIGATION OF THE EFFECTS OF WING AND TAIL MODIFICATIONS ON THE LOW-SPEED STABILITY CHARACTERISTICS OF A MODEL HAVING A THIN 40° SWEPT WING OF ASPECT RATIO 3.5. Joseph Weil, William C. Sleeman, Jr., and Andrew L. Byrnes, Jr. April 1953. 95p. diagrs., photos., tab. (NACA RM L53C09)

THE EFFECTS OF NACELLES AND OF EXTENDED SPLIT FLAPS ON THE LONGITUDINAL CHARACTERISTICS OF A WING-FUSELAGE-TAIL COMBINATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. Bruce E. Tinling and Armando E. Lopez. June 1953. 47p. diagrs., tab. (NACA RM A53D06)

THE LOW-SPEED LIFT AND DRAG CHARACTERISTICS OF A SERIES OF AIRPLANE MODELS HAVING TRIANGULAR OR MODIFIED TRIANGULAR WINGS. David Graham. June 1953. 49p. diagrs., photo., tabs. (NACA RM A53D14)

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LONGITUDINAL STABILITY AND WAKE-FLOW CHARACTERISTICS OF A TWISTED AND CAMBERED WING-FUSELAGE COMBINATION OF 45° SWEEPBACK AND ASPECT RATIO 8 WITH A HORIZONTAL TAIL AND STALL-CONTROL DEVICES AT A REYNOLDS NUMBER OF 4.0×10^6. Gerald V. Foster. June 1953. 51p. diagrs., photos., tab. (NACA RM L53D08)

EFFECTS OF HORIZONTAL-TAIL HEIGHT AND A WING LEADING-EDGE MODIFICATION CONSISTING OF A FULL-SPAN FLAP AND A PARTIAL-SPAN CHORD-EXTENSION ON THE AERODYNAMIC CHARACTERISTICS IN PITCH AT HIGH SUBSONIC SPEEDS OF A MODEL WITH A 45° SWEPTBACK WING. William D. Morrison, Jr. and William J. Alford, Jr. June 1953. 37p. diagrs., photo., tab. (NACA RM L53E06)

WIND-TUNNEL INVESTIGATION TO DETERMINE THE HORIZONTAL- AND VERTICAL-TAIL CONTRIBUTIONS TO THE STATIC LATERAL STABILITY CHARACTERISTICS OF A COMPLETE-MODEL SWEPT-WING CONFIGURATION AT HIGH SUBSONIC SPEEDS. James W. Wiggins, Richard E. Kuhn, and Paul G. Fournier. July 1953. 34p. diagrs., photo. (NACA RM L53E19)

THE EFFECTS OF LEADING-EDGE EXTENSIONS, A TRAILING-EDGE EXTENSION, AND A FENCE ON THE STATIC LONGITUDINAL STABILITY OF A WING-FUSELAGE-TAIL COMBINATION HAVING A WING WITH 35° OF SWEEPBACK AND AN ASPECT RATIO OF 4.5. Ralph Selan and Angelo Bandettini. August 1953. 81p. diagrs., photos., tabs. (NACA RM A53E12)

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THE RESULTS OF WIND-TUNNEL TESTS AT LOW SPEEDS OF A FOUR-ENGINE PROPELLER-DRIVEN AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. George G. Edwards, Donald A. Buell, and Jerald K. Dickson. December 1953. 121p. diagrs., photo., tabs. (NACA RM A53I28)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF THE EFFECTS OF CHORDWISE WING FENCES AND HORIZONTAL-TAIL POSITION ON THE STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF AN AIRPLANE MODEL WITH A 35° SWEPTBACK WING. M. J. Queijo, Byron M. Jaquet, and Walter D. Wolhart. 1954. ii, 29p. diagrs., photos., tab. (NACA Rept. 1203. Supersedes RM L50K07; RM L51H17)

THE EFFECTS OF OPERATING PROPELLERS ON THE LONGITUDINAL CHARACTERISTICS AT HIGH SUBSONIC SPEEDS OF A FOUR-ENGINE TRACTOR AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. Fred B. Sutton and Fred A. Demele. January 1954. 106p. diagrs., photo., 11 tabs. (NACA RM A53J23)

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THE EFFECTS OF HORIZONTAL-TAIL HEIGHT AND A PARTIAL-SPAN LEADING-EDGE EXTENSION ON THE STATIC LONGITUDINAL STABILITY OF A WING-FUSELAGE-TAIL COMBINATION HAVING A SWEPTBACK WING. Angelo Bandettini and Ralph Selan. March 1954. 54p. diagrs., photos., 2 tabs. (NACA RM A53J07)

DISTRIBUTION OF LIFT AND PITCHING MOMENT BETWEEN WING AND FUSELAGE AND EFFECTS OF WING FLEXIBILITY AND DIVE BRAKE ON A 1/30-SCALE SEMISPAN MODEL OF THE BELL X-5 AIRPLANE AT TRANSONIC SPEEDS AS DETERMINED BY THE NACA WING-FLOW METHOD. Garland J. Morris and Norman S. Silsby. March 1954. 46p. diagrs., photos., tab. (NACA RM L54A11)

FLIGHT INVESTIGATION OF THE EFFECTS OF A PARTIAL-SPAN LEADING-EDGE CHORD EXTENSION OF THE AERODYNAMIC CHARACTERISTICS OF A 35° SWEPT-WING FIGHTER AIRPLANE. Frederick H. Matteson and Rudolph D. Van Dyke, Jr. April 1954. 34p. diagrs., photos., tabs. (NACA RM A54B26)

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EFFECTS OF HIGH-LIFT DEVICES AND HORIZONTAL-TAIL LOCATION ON THE LOW-SPEED CHARACTERISTICS OF A LARGE-SCALE 45° SWEPT-WING AIRPLANE CONFIGURATION. Ralph L. Maki and Ursel R. Embry. August 1954. 46p. diagrs., photo., tabs. (NACA RM A54E10)

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ANALYSIS OF WIND-TUNNEL TESTS AT LOW SPEEDS OF A FOUR-ENGINE PROPELLER-DRIVEN AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK. George G. Edwards and Donald A. Buell. October 1954. 137p. diagrs., photos., 2 tabs. (NACA RM A54F14)

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A FLIGHT EVALUATION OF THE LONGITUDINAL STABILITY CHARACTERISTICS ASSOCIATED WITH THE PITCH-UP OF A SWEPT-WING AIRPLANE IN MANEUVERING FLIGHT AT TRANSONIC SPEEDS. Seth B. Anderson and Richard S. Bray. 1955. ii, 12p. diagrs., photo., tab. (NACA Rept. 1237. Supersedes RM A51I12)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF EFFECT OF SIZE AND POSITION OF CLOSED AIR DUCTS ON STATIC LONGITUDINAL AND STATIC LATERAL STABILITY CHARACTERISTICS OF UNSWEPT-MIDWING MODELS HAVING WINGS OF ASPECT RATIO 2, 4, AND 6. Byron M. Jaquet and James L. Williams. September 1955. 45p. diagrs., photos., tabs. (NACA TN 3481)

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STATIC LONGITUDINAL AND LATERAL STABILITY CHARACTERISTICS AT LOW SPEED OF UNSWEPT-MIDWING MODELS HAVING WINGS WITH AN ASPECT RATIO OF 2, 4, OR 6. Walter D. Wolhart and David F. Thomas, Jr. May 1956. 41p. diagrs., photos., tabs. (NACA TN 3649)

(1.7.1.1.4)
Propeller and Jet Interference

THE RESULTS OF WIND-TUNNEL TESTS AT LOW SPEEDS OF A FOUR-ENGINE PROPELLER-DRIVEN AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. George G. Edwards, Donald A. Buell, and Jerald K. Dickson. December 1953. 121p. diagrs., photo., tabs. (NACA RM A53I28)

THE EFFECTS OF OPERATING PROPELLERS ON THE LONGITUDINAL CHARACTERISTICS AT HIGH SUBSONIC SPEEDS OF A FOUR-ENGINE TRACTOR AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. Fred B. Sutton and Fred A. Demele. January 1954. 106p. diagrs., photo., 11 tabs. (NACA RM A53J23)

ANALYSIS OF WIND-TUNNEL TESTS AT LOW SPEEDS OF A FOUR-ENGINE PROPELLER-DRIVEN AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK. George G. Edwards and Donald A. Buell. October 1954. 137p. diagrs., photos., 2 tabs. (NACA RM A54F14)

(1.7.1.1.5)
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EFFECT OF WING-TANK LOCATION ON THE DRAG AND TRIM OF A SWEPT-WING MODEL AS MEASURED IN FLIGHT AT TRANSONIC SPEEDS. Clement J. Welsh and John D. Morrow. April 4, 1950. 18p. diagrs., photos. (NACA RM L50A19)

EXPERIMENTAL INVESTIGATION OF VARIOUS WING-MOUNTED EXTERNAL STORES ON A WING-FUSELAGE COMBINATION HAVING A SWEPTBACK WING OF INVERSE TAPER RATIO. Kenneth P. Spreemann and H. Norman Silvers. September 15, 1950. 29p. diagrs., photos., tab. (NACA RM L9J06)

TRANSONIC FLIGHT TESTS TO COMPARE THE ZERO-LIFT DRAG OF UNDERSLUNG AND SYMMETRICAL NACELLES VARIED CHORDWISE AT 40 PERCENT SEMISPAN OF A 45° SWEPTBACK, TAPERED WING. William B. Pepper, Jr., and Sherwood Hoffman. October 25, 1950. 36p. diagrs., photos., tabs. (NACA RM L50G17a)

INVESTIGATION OF THE EFFECTS OF GEOMETRIC CHANGES IN AN UNDERWING PYLON-SUSPENDED EXTERNAL-STORE INSTALLATION ON THE AERODYNAMIC CHARACTERISTICS OF A 45° SWEPTBACK WING AT HIGH SUBSONIC SPEEDS. Kenneth P. Spreemann and William J. Alford, Jr. March 5, 1951. 91p. diagrs., photos., tabs. (NACA RM L50L12)

COMPARISON OF ZERO-LIFT DRAGS DETERMINED BY FLIGHT TESTS AT TRANSONIC SPEEDS OF SYMMETRICALLY MOUNTED NACELLES IN VARIOUS SPANWISE POSITIONS ON A 45° SWEPTBACK WING AND BODY COMBINATION. William B. Pepper, Jr., and Sherwood Hoffman. May 23, 1951. 29p. diagrs., photos., tabs. (NACA RM L51D06)

COMPARISON OF ZERO-LIFT DRAG DETERMINED BY FLIGHT TESTS AT TRANSONIC SPEEDS OF PYLON, UNDERSLUNG, AND SYMMETRICALLY MOUNTED NACELLES AT 40 PERCENT SEMISPAN OF A 45° SWEPTBACK WING AND BODY COMBINATION. Sherwood Hoffman. June 1951. 18p. diagrs., photos., tabs. (NACA RM L51D26)

COMPARISON OF ZERO-LIFT DRAGS DETERMINED BY FLIGHT TESTS AT TRANSONIC SPEEDS OF SYMMETRICALLY MOUNTED NACELLES IN VARIOUS CHORDWISE POSITIONS AT THE WING TIP OF A 45° SWEPTBACK WING AND BODY COMBINATION. William B. Pepper, Jr., and Sherwood Hoffman. September 1951. 16p. diagrs., photos. (NACA RM L51F13)

INVESTIGATION OF THE EFFECT OF A NACELLE AT VARIOUS CHORDWISE AND VERTICAL POSITIONS ON THE AERODYNAMIC CHARACTERISTICS AT HIGH SUBSONIC SPEEDS OF A 45° SWEPTBACK WING WITH AND WITHOUT A FUSELAGE. H. Norman Silvers, Thomas J. King, Jr., and Thomas B. Pasteur, Jr. September 1951. 71p. diagrs., photos., 3 tabs. (NACA RM L51H16)

TRANSONIC FLIGHT TESTS TO DETERMINE ZERO-LIFT DRAG AND PRESSURE RECOVERY OF NACELLES LOCATED AT THE WING TIPS ON A 45° SWEPTBACK WING AND BODY COMBINATION. Sherwood Hoffman and William B. Pepper, Jr. January 1952. 21p. diagrs., photos., tabs. (NACA RM L51K02)

TRANSONIC FLIGHT TESTS TO COMPARE THE ZERO-LIFT DRAGS OF 45° SWEPTBACK WINGS OF ASPECT RATIO 3.55 AND 6.0 WITH AND WITHOUT NACELLES AT THE WING TIPS. Sherwood Hoffman and Richard C. Mapp, Jr. March 1952. 17p. diagrs., photos. (NACA RM L51L27)

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INVESTIGATION OF THE EFFECT OF CHORDWISE POSITIONING AND SHAPE OF AN UNDERWING NACELLE ON THE HIGH-SPEED AERODYNAMIC CHARACTERISTICS OF A 45° SWEPTBACK TAPERED-IN-THICKNESS-RATIO WING OF ASPECT RATIO 6. H. Norman Silvers and Thomas J. King, Jr. January 1953. 50p. diagrs. (NACA RM L52K25)

LOW-SPEED INVESTIGATION OF THE AERODYNAMIC, CONTROL, AND HINGE-MOMENT CHARACTERISTICS OF TWO TYPES OF CONTROLS ON A DELTA-WING-FUSELAGE MODEL WITH AND WITHOUT NACELLES. William I. Scallion. May 1953. 47p. diagrs., photos., tabs. (NACA RM L53C18)

SOME EFFECTS OF EXTERNAL WING TIP STORES ON THE ROLLING EFFECTIVENESS AND DRAG OF PLAIN AND HALF-DELTA TIP AILERONS ON A 4-PERCENT-THICK, TAPERED, UNSWEPT WING. Roland D. English. August 1954. 14p. diagrs., photos., tab. (NACA RM L54F29a)

ARRANGEMENT OF FUSIFORM BODIES TO REDUCE THE WAVE DRAG AT SUPERSONIC SPEEDS. Morris D. Friedman and Doris Cohen. 1955. ii, 8p. diagrs. (NACA Rept. 1236. Supersedes RM A51I20; TN 3345)

APPLICATION OF WING-BODY THEORY TO DRAG REDUCTION AT LOW SUPERSONIC SPEEDS. Barrett S. Baldwin, Jr., and Robert R. Dickey. January 1955. 42p. (NACA RM A54J19)

PRELIMINARY STUDY OF SOME FACTORS WHICH AFFECT THE STALL-FLUTTER CHARACTERISTICS OF THIN WINGS. A. Gerald Rainey. March 1956. 33p. diagrs., photo., tab. (NACA TN 3622. Supersedes RM L52D08)

(1.7.1.2) SPECIFIC AIRPLANES

THE AERODYNAMIC EFFECTS OF ROCKETS AND FUEL TANKS MOUNTED UNDER THE SWEPTBACK WING OF AN AIRPLANE MODEL. Lee E. Boddy and Charles P. Morrill. Jr. April 23. 1948. 19p. diagrs. (NACA RM A7J03)

MEASUREMENTS OF THE CHORDWISE PRESSURE DISTRIBUTIONS OVER THE WING OF THE XS-1 RESEARCH AIRPLANE IN FLIGHT. De E. Beeler, Milton D. McLaughlin, and Dorothy C. Clift. August 4, 1948. 35p. diagrs., photo., tab. (NACA RM L8G21)

PRELIMINARY RESULTS OF NACA TRANSONIC FLIGHTS OF THE XS-1 AIRPLANE WITH 10-PERCENT-THICK WING AND 8-PERCENT-THICK HORIZONTAL TAIL. Hubert M. Drake, Harold R. Goodman, and Herbert H. Hoover. October 13, 1948. 18p. diagrs., photos. (NACA RM L8I29)

EFFECTS OF A SWEPTBACK HYDROFOIL ON THE FORCE AND LONGITUDINAL STABILITY CHARACTERISTICS OF A TYPICAL HIGH-SPEED AIRPLANE. Raymond B. Wood. December 2, 1948. 19p. diagrs., photo., tabs. (NACA RM L8I30a)

WIND-TUNNEL INVESTIGATION OF A TAILLESS TRIANGULAR-WING FIGHTER AIRCRAFT AT MACH NUMBERS FROM 0.5 TO 1.5. Leslie F. Lawrence and James L. Summers. June 24, 1949. 56p. diagrs., photos., tab. (NACA RM A9B16)

PRELIMINARY THEORETICAL AND FLIGHT INVESTIGATION OF THE LATERAL OSCILLATION OF THE X-1 AIRPLANE. Hubert M. Drake and Helen L. Wall. July 19, 1949. 24p. diagrs., photo., tab. (NACA RM L9F07)

MEASUREMENTS OF AILERON EFFECTIVENESS OF THE BELL X-1 AIRPLANE AT MACH NUMBERS BETWEEN 0.9 AND 1.06. Hubert M. Drake. August 4, 1949. 5p. diagrs. (NACA RM L9G19a)

LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF A SEMISPAN WIND-TUNNEL MODEL OF A TAILLESS AIRPLANE AND A COMPARISON WITH COMPLETE-MODEL WIND-TUNNEL TESTS AND SEMISPAN-MODEL WING-FLOW TESTS. Kenneth W. Goodson and Thomas J. King, Jr. October 10, 1949. 63p. diagrs., photos. (NACA RM L9C31)

AERODYNAMIC CHARACTERISTICS AND FLYING QUALITIES OF A TAILLESS TRIANGULAR-WING AIRPLANE CONFIGURATION AS OBTAINED FROM FLIGHTS OF ROCKET-PROPELLED MODELS AT TRANSONIC AND LOW SUPERSONIC SPEEDS. Grady L. Mitcham, Joseph E. Stevens, and Harry P. Norris. February 9, 1950. 67p. diagrs., photos., tabs. (NACA RM L9L07)

EXPERIMENTAL INVESTIGATION OF VARIOUS WING-MOUNTED EXTERNAL STORES ON A WING-FUSELAGE COMBINATION HAVING A SWEPTBACK WING OF INVERSE TAPER RATIO. Kenneth P. Spreemann and H. Norman Silvers. September 15, 1950. 29p. diagrs., photos., tab. (NACA RM L9J06)

ELEVATOR-STABILIZER EFFECTIVENESS AND TRIM OF THE X-1 AIRPLANE TO A MACH NUMBER OF 1.06. Hubert M. Drake and John R. Carden. November 1, 1950. 12p. diagrs. (NACA RM L50G20)

PRELIMINARY FLIGHT INVESTIGATION OF THE MANEUVERING ACCELERATIONS AND BUFFET BOUNDARY OF A 35° SWEPT-WING AIRPLANE AT HIGH ALTITUDE AND TRANSONIC SPEEDS. George A. Rathert, Jr., Howard L. Ziff, and George E. Cooper. February 21, 1951. 12p. diagrs., photo., tab. (NACA RM A50L04)

REVIEW OF SOME RECENT DATA ON BUFFET BOUNDARIES. Paul E. Purser and John A. Wyss. May 23, 1951. 11p. diagrs. (NACA RM L51E02a)

TABULATED PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS MEASURED ON THE WING OF THE BELL X-1 AIRPLANE IN AN UNACCELERATED STALL AND IN PULL-UPS AT MACH NUMBERS OF 0.74, 0.75, 0.94, AND 0.97. Lawrence A. Smith. June 19, 1951. 49p. diagrs., photo., tabs. (NACA RM L51B23)

EFFECT OF FORMATION POSITION ON LOAD FACTORS OBTAINED ON F2H AIRPLANES. Carl R. Huss and Harold A. Hamer. December 1951. 15p. diagrs., 3 tabs. (NACA RM L51I05)

FLIGHT CALIBRATION OF ANGLE-OF-ATTACK AND SIDESLIP DETECTORS ON THE FUSELAGE OF A 35° SWEPT-WING FIGHTER AIRPLANE. Norman M. McFadden, George A. Rathert, Jr., and Richard S. Bray. February 1952. 26p. diagrs., photos. (NACA RM A52A04)

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A CORRELATION WITH FLIGHT TESTS OF RESULTS OBTAINED FROM THE MEASUREMENT OF WING PRESSURE DISTRIBUTIONS ON A 1/4-SCALE MODEL OF THE X-1 AIRPLANE (10-PERCENT-THICK WING). Jack F. Runckel and James H. Henderson. September 1952. 60p. diagrs., photos., tab. (NACA RM L52E29)

THE EFFECTS OF SWEEPBACK ON LONGITUDINAL CHARACTERISTICS OF A 1/30-SCALE SEMISPAN MODEL OF THE BELL X-5 AIRPLANE AS DETERMINED FROM NACA WING-FLOW TESTS AT TRANSONIC SPEEDS. Joseph J. Kolnick and Robert M. Kennedy. November 1952. 48p. diagrs., photos., tab. (NACA RM L52I23)

LONGITUDINAL-CONTROL EFFECTIVENESS AND DOWNWASH CHARACTERISTICS AT TRANSONIC SPEEDS OF A 1/30-SCALE SEMISPAN MODEL OF THE BELL X-5 AIRPLANE AS DETERMINED BY THE NACA WING-FLOW METHOD. Norman S. Silsby and Garland J. Morris. January 1953. 48p. diagrs., photos., 2 tabs. (NACA RM L52K12)

FLIGHT MEASUREMENTS OF THE STABILITY CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE IN SIDESLIPS AT 59° SWEEPBACK. Joan M. Childs. February 1953. 23p. diagrs., photos., tab. (NACA RM L52K13b)

PRELIMINARY RESULTS OF STABILITY AND CONTROL INVESTIGATION OF THE BELL X-5 RESEARCH AIRPLANE. Thomas W. Finch and Donald W. Briggs. February 1953. 35p. diagrs., photos., tabs. (NACA RM L52K18b)

FLIGHT DETERMINATION OF THE STATIC LONGITUDINAL STABILITY BOUNDARIES OF THE BELL X-5 RESEARCH AIRPLANE WITH 59° SWEEPBACK. Thomas W. Finch and Joseph A. Walker. February 1953. 51p. diagrs., photo., tab. (NACA RM L53A09b)

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COMPARISON OF MEASURED AND PREDICTED INDICATED ANGLES OF ATTACK NEAR THE FUSELAGES OF A TRIANGULAR-WING WIND-TUNNEL MODEL AND A SWEPT-WING FIGHTER AIRPLANE IN FLIGHT. Norman M. McFadden, John L. McCloud, III, and Harry A. James. March 1953. 13p. diagrs. (NACA RM A53A15)

AILERON AND ELEVATOR HINGE MOMENTS OF THE BELL X-1 AIRPLANE MEASURED IN TRANSONIC FLIGHT. Hubert M. Drake and John B. McKay. June 1953. 27p. diagrs. (NACA RM L53E04)

THE EFFECTS OF FENCES ON THE HIGH-SPEED LONGITUDINAL STABILITY OF A SWEPT-WING AIRPLANE. Richard S. Bray. August 1953. 37p. diagrs., photos., tabs. (NACA RM A53F23)

LONGITUDINAL FLIGHT CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 59° SWEEPBACK WITH MODIFIED WING ROOTS. James A. Martin. August 1953. 25p. diagrs., photos., tab. (NACA RM L53E28)

FLIGHT MEASUREMENTS OF LIFT AND DRAG FOR THE BELL X-1 RESEARCH AIRPLANE HAVING A 10-PERCENT-THICK WING. Edwin J. Saltzman. September 1953. 37p. diagrs., tab. (NACA RM L53F08)

A TRANSONIC WIND-TUNNEL INVESTIGATION OF THE LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF A 0.09-SCALE MODEL OF THE BELL X-5 RESEARCH AIRPLANE AND COMPARISON WITH FLIGHT. Ralph P. Bielat and George S. Campbell. October 1953. 65p. diagrs., photo. (NACA RM L53H18)

SOME EFFECTS OF AEROELASTICITY AND SWEEPBACK ON THE ROLLING EFFECTIVENESS AND DRAG OF A 1/11-SCALE MODEL OF THE BELL X-5 AIRPLANE WING AT MACH NUMBERS FROM 0.6 TO 1.5. Roland D. English. November 1953. 21p. diagrs., photos. (NACA RM L53I18b)

AN ANALYTICAL STUDY OF THE EFFECT OF AIRPLANE WAKE ON THE LATERAL DISPERSION OF AERIAL SPRAYS. Wilmer H. Reed, III. 1954. ii, 16p. diagrs., 3 tabs. (NACA Rept. 1196. Formerly TN 3032)

DISTRIBUTION OF LIFT AND PITCHING MOMENT BETWEEN WING AND FUSELAGE AND EFFECTS OF WING FLEXIBILITY AND DIVE BRAKE ON A 1/30-SCALE SEMISPAN MODEL OF THE BELL X-5 AIRPLANE AT TRANSONIC SPEEDS AS DETERMINED BY THE NACA WING-FLOW METHOD. Garland J. Morris and Norman S. Silsby. March 1954. 46p. diagrs., photos., tab. (NACA RM L54A11)

FLIGHT INVESTIGATION OF THE EFFECTS OF A PARTIAL-SPAN LEADING-EDGE CHORD EXTENSION OF THE AERODYNAMIC CHARACTERISTICS OF A 35° SWEPT-WING FIGHTER AIRPLANE. Frederick H. Matteson and Rudolph D. Van Dyke, Jr. April 1954. 34p. diagrs., photos., tabs. (NACA RM A54B26)

THE EFFECT OF BLUNT-TRAILING-EDGE MODIFICATIONS ON THE HIGH-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A SWEPT-WING FIGHTER AIRPLANE. Melvin Sadoff, Frederick H. Matteson, and Rudolph D. Van Dyke, Jr. May 1954. 55p. diagrs., photos., tab. (NACA RM A54C31)

FLIGHT DETERMINATION OF THE BUFFETING CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 58.7° SWEEPBACK. Donald W. Briggs. May 1954. 31p. diagrs., photo., tabs. (NACA RM L54C17)

MEASUREMENT AND ANALYSIS OF WING AND TAIL BUFFETING LOADS ON A FIGHTER AIRPLANE. Wilber B. Huston and T. H. Skopinski. 1955. i, 27p. diagrs., photo., tabs. (NACA Rept. 1219. Supersedes TN 3080)

A FLIGHT EVALUATION OF THE LONGITUDINAL STABILITY CHARACTERISTICS ASSOCIATED WITH THE PITCH-UP OF A SWEPT-WING AIRPLANE IN MANEUVERING FLIGHT AT TRANSONIC SPEEDS. Seth B. Anderson and Richard S. Bray. 1955. ii, 12p. diagrs., photo., tab. (NACA Rept. 1237. Supersedes RM A51I12)

THE DYNAMIC-RESPONSE CHARACTERISTICS OF A 35° SWEPT-WING AIRPLANE AS DETERMINED FROM FLIGHT MEASUREMENTS. William C. Triplett, Stuart C. Brown, and G. Allan Smith. 1955. ii, 25p. diagrs., tabs. (NACA Rept. 1250. Supersedes RM A51G27; RM A52I17)

WING-LOAD MEASUREMENTS OF THE BELL X-5 RESEARCH AIRPLANE AT A SWEEP ANGLE OF 58.7°. Richard D. Banner, Robert D. Reed, and William L. Marcy. April 1955. 22p. diagrs., photo., tab. (NACA RM H55A11)

FLIGHT DETERMINATION OF THE LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 58.7° SWEEPBACK. Thomas W. Finch. May 1955. 30p. diagrs., photo., tab. (NACA RM H55C07)

FLIGHT TESTS OF LEADING-EDGE AREA SUCTION ON A FIGHTER-TYPE AIRPLANE WITH A 35° SWEPTBACK WING. Richard S. Bray and Robert C. Innis. June 1955. 30p. diagrs., photos., tab. (NACA RM A55C07)

FLIGHT MEASUREMENTS OF HORIZONTAL-TAIL LOADS ON THE BELL X-5 RESEARCH AIRPLANE AT A SWEEP ANGLE OF 58.7°. Robert D. Reed. July 1955. 19p. diagrs., photo., tab. (NACA RM H55E20a)

A COMPARISON OF THE MEASURED AND PREDICTED LATERAL OSCILLATORY CHARACTERISTICS OF A 35° SWEPT-WING FIGHTER AIRPLANE. Walter E. McNeill and George E. Cooper. August 1955. 22p. diagrs., photo., 3 tabs. (NACA TN 3521. Formerly RM A51C28)

ANALYSIS OF THE HORIZONTAL-TAIL LOADS MEASURED IN FLIGHT ON A MULTIENGINE JET BOMBER. William S. Aiken, Jr. and Bernard Wiener. September 1955. i, 69p. diagrs., photo., 6 tabs. (NACA TN 3479)

THE EFFECTIVENESS OF WING VORTEX GENERATORS IN IMPROVING THE MANEUVERING CHARACTERISTICS OF A SWEPT-WING AIRPLANE AT TRANSONIC SPEEDS. Norman M. McFadden, George A. Rathert, Jr., and Richard S. Bray. September 1955. 43p. diagrs., photos., tab. (NACA TN 3523. Supersedes RM A51J18)

FLIGHT MEASUREMENTS OF THE DYNAMIC LATERAL AND LONGITUDINAL STABILITY OF THE BELL X-5 RESEARCH AIRPLANE AT 58.7° SWEEPBACK. Edward N. Videan. October 1955. 68p. diagrs., photo., tabs. (NACA RM H55H10)

FLIGHT CALIBRATION OF FOUR AIRSPEED SYSTEMS ON A SWEPT-WING AIRPLANE AT MACH NUMBERS UP TO 1.04 BY THE NACA RADAR-PHOTOTHEODOLITE METHOD. Jim Rogers Thompson, Richard S. Bray, and George E. Cooper. November 1955. 41p. diagrs., photos., tab. (NACA TN 3526. Supersedes RM A50H24)

A WIND-TUNNEL INVESTIGATION OF A 0.4-SCALE MODEL OF AN ASSAULT-TRANSPORT AIRPLANE WITH BOUNDARY-LAYER CONTROL APPLIED. Marvin P. Fink, Bennie W. Cocke, and Stanley Lipson. May 1956. 63p. diagrs., photos. (NACA RM L55G26a)

INVESTIGATION OF LATERAL CONTROL NEAR THE STALL. FLIGHT TESTS WITH HIGH-WING AND LOW-WING MONOPLANES OF VARIOUS CONFIGURATIONS. Fred E. Weick and H. Norman Abramson, Agricultural and Mechanical College of Texas. June 1956. 34p. diagrs., photos., tabs. (NACA TN 3676)

INVESTIGATION OF LATERAL CONTROL NEAR THE STALL. ANALYSIS FOR REQUIRED LONGITUDINAL TRIM CHARACTERISTICS AND DISCUSSION OF DESIGN VARIABLES. Fred E. Weick and H. Norman Abramson, Agricultural and Mechanical College of Texas. June 1956. 91p. diagrs., tabs. (NACA TN 3677)

(1.7.1.3) PERFORMANCE

TIME HISTORIES OF MANEUVERS PERFORMED WITH AN F-86A AIRPLANE DURING SQUADRON OPERATIONS. Harold A. Hamer and Campbell Henderson. February 1952. 90p. diagrs., 3 tabs. (NACA RM L51K30)

TECHNIQUES FOR DETERMINING THRUST IN FLIGHT FOR AIRPLANES EQUIPPED WITH AFTERBURNERS. L. Stewart Rolls, C. Dewey Havill, and George R. Holden. January 1953. 27p. diagrs., photos. (NACA RM A52K12)

A FLIGHT INVESTIGATION OF THE EFFECT OF LEADING-EDGE CAMBER ON THE AERODYNAMIC CHARACTERISTICS OF A SWEPT-WING AIRPLANE. Seth B. Anderson, Frederick H. Matteson, and Rudolph D. Van Dyke, Jr. February 1953. 23p. diagrs., photos., tab. (NACA RM A52L16a)

LIFT AND DRAG CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 59° SWEEPBACK FOR MACH NUMBERS FROM 0.60 TO 1.03. Donald R. Bellman. February 1953. 37p. diagrs., photos., tab. (NACA RM L53A09c)

A FLIGHT COMPARISON OF A SUBMERGED INLET AND A SCOOP INLET AT TRANSONIC SPEEDS. L. Stewart Rolls. March 1953. 41p. diagrs., photo., tab. (NACA RM A53A06)

THE EFFECTS OF FENCES ON THE HIGH-SPEED LONGITUDINAL STABILITY OF A SWEPT-WING AIRPLANE. Richard S. Bray. August 1953. 37p. diagrs., photos., tabs. (NACA RM A53F23)

THEORETICAL AND EXPERIMENTAL INVESTIGATION OF ADDITIVE DRAG. Merwin Sibulkin. 1954. ii, 12p. diagrs. (NACA Rept. 1187. Formerly RM E51B13)

THE EFFECT OF BLUNT-TRAILING-EDGE MODIFICATIONS ON THE HIGH-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A SWEPT-WING FIGHTER AIRPLANE. Melvin Sadoff, Frederick H. Matteson, and Rudolph D. Van Dyke, Jr. May 1954. 55p. diagrs., photos., tab. (NACA RM A54C31)

OPTIMUM FLIGHT PATHS OF TURBOJET AIRCRAFT. (Traiettorie Ottime Di Volo Degli Aeroplani Azionati Da Turboreattori). Angelo Miele. September 1955. 47p. diagrs., tabs. (NACA TM 1389. Trans. from L'Aerotecnica, v. 32, no. 4, 1952, p. 206-219)

THE EFFECTIVENESS OF WING VORTEX GENERATORS IN IMPROVING THE MANEUVERING CHARACTERISTICS OF A SWEPT-WING AIRPLANE AT TRANSONIC SPEEDS. Norman M. McFadden, George A. Rathert, Jr., and Richard S. Bray. September 1955. 43p. diagrs., photos., tab. (NACA TN 3523. Supersedes RM A51J18)

GENERAL SOLUTIONS OF OPTIMUM PROBLEMS IN NONSTATIONARY FLIGHT. (Soluzioni Generali di Problemi di Ottimo in Volo Non-Stazionario). Angelo Miele. October 1955. 25p. diagrs., tab. (NACA TM 1388. Trans. from L'Aerotecnica, v.32, no.3, 1952, p.135-142)

MINIMUM WAVE DRAG FOR ARBITRARY ARRANGEMENTS OF WINGS AND BODIES. Robert T. Jones. February 1956. 11p. diagrs. (NACA TN 3530)

INVESTIGATION OF THE EFFECTS OF GROUND PROXIMITY AND PROPELLER POSITION ON THE EFFECTIVENESS OF A WING WITH LARGE-CHORD SLOTTED FLAPS IN REDIRECTING PROPELLER SLIPSTREAMS DOWNWARD FOR VERTICAL TAKE-OFF. Richard E. Kuhn. March 1956. 38p. diagrs., photos., tab. (NACA TN 3629)

INVESTIGATION AT ZERO FORWARD SPEED OF A LEADING-EDGE SLAT AS A LONGITUDINAL CONTROL DEVICE FOR VERTICALLY RISING AIRPLANES THAT UTILIZE THE REDIRECTED-SLIPSTREAM PRINCIPLE. Richard E. Kuhn. May 1956. 33p. diagrs., photos. (NACA TN 3692)

PRELIMINARY INVESTIGATION OF THE EFFECTIVENESS OF A SLIDING FLAP IN DEFLECTING A PROPELLER SLIPSTREAM DOWNWARD FOR VERTICAL TAKE-OFF. Richard E. Kuhn and Kenneth P. Spreemann. May 1956. 25p. diagrs., photo. (NACA TN 3693)

A SONIC-FLOW ORIFICE PROBE FOR THE IN-FLIGHT MEASUREMENT OF TEMPERATURE PROFILES OF A JET ENGINE EXHAUST WITH AFTERBURNING. C. Dewey Havill and L. Stewart Rolls. May 1956. 18p. diagrs., photos. (NACA TN 3714)

(1.7.2)
MISSILES

SUMMARY OF FLUTTER EXPERIENCES AS A GUIDE TO THE PRELIMINARY DESIGN OF LIFTING SURFACES ON MISSILES. Dennis J. Martin. November 1951. 16p. diagrs. (NACA RM L51J30)

A UNIFIED TWO-DIMENSIONAL APPROACH TO THE CALCULATION OF THREE-DIMENSIONAL HYPERSONIC FLOWS, WITH APPLICATION TO BODIES OF REVOLUTION. A. J. Eggers, Jr. and Raymond C. Savin. 1955. ii, 27p. diagrs., tab. (NACA Rept. 1249. Supersedes TN 2811)

IMPINGEMENT OF WATER DROPLETS ON A SPHERE. Robert G. Dorsch, Paul G. Saper, and Charles F. Kadow. November 1955. 29p. diagrs., tab. (NACA TN 3587)

RESULTS OF A FLIGHT INVESTIGATION TO DETERMINE THE ZERO-LIFT DRAG CHARACTERISTICS OF A 60° DELTA WING WITH NACA 65-006 AIRFOIL SECTION AND VARIOUS DOUBLE-WEDGE SECTIONS AT MACH NUMBERS FROM 0.7 TO 1.6. Clement J. Welsh. April 1956. 13p. diagrs., photo. (NACA TN 3650. Supersedes RM L50F01)

(1.7.2.1)
COMPONENTS IN COMBINATION

LARGE-SCALE FLIGHT MEASUREMENTS OF ZERO-LIFT DRAG AT MACH NUMBERS FROM 0.86 TO 1.5 OF A WING-BODY COMBINATION HAVING A 60° TRIANGULAR WING WITH NACA 65A003 SECTIONS. Robert L. Nelson. June 1, 1950. 10p. diagrs., photos., tab. (NACA RM L50D26)

FLIGHT INVESTIGATION OF A ROLL-STABILIZED MISSILE CONFIGURATION AT VARYING ANGLES OF ATTACK AT MACH NUMBERS BETWEEN 0.8 AND 1.79. Jacob Zarovsky and Robert A. Gardiner. March 6, 1951. 38p. diagrs., photos., tab. (NACA RM L50H21)

LARGE-SCALE FLIGHT MEASUREMENTS OF ZERO-LIFT DRAG AT MACH NUMBERS FROM 0.8 TO 1.6 OF A WING-BODY COMBINATION HAVING AN UNSWEPT 4.5-PERCENT-THICK WING WITH MODIFIED HEXAGONAL SECTIONS. Eugene D. Schult. March 23, 1951. 14p. diagrs., photos., tab. (NACA RM L51A15)

DOWNWASH AND SIDEWASH FIELDS BEHIND CRUCIFORM WINGS. John R. Spreiter. January 1952. 18p. photos., diagrs. (NACA RM A51L17)

FLIGHT MEASUREMENTS AT MACH NUMBERS FROM 1.1 TO 1.9 OF THE ZERO-LIFT DRAG OF A TWIN-ENGINE SUPERSONIC RAM-JET CONFIGURATION. Abraham Leiss. June 1952. 16p. diagrs., photos. (NACA RM L52D24)

LARGE-SCALE FLIGHT MEASUREMENTS OF ZERO-LIFT DRAG AND LOW-LIFT LONGITUDINAL CHARACTERISTICS OF A DIAMOND-WING—BODY COMBINATION AT MACH NUMBERS FROM 0.725 TO 1.54. Harvey A. Wallskog and John D. Morrow. April 1953. 18p. diagrs., photo., tab. (NACA RM L53C17)

THEORY OF WING-BODY DRAG AT SUPERSONIC SPEEDS. Robert T. Jones. September 1953. 11p. diagrs. (NACA RM A53H18a)

INVESTIGATION OF A CANARD MISSILE CONFIGURATION (NACA RM-4) IN THE LANGLEY 9-INCH SUPERSONIC TUNNEL AT MACH NUMBERS OF 1.62 AND 1.93. Carl E. Grigsby. June 1954. 24p. diagrs., photo. (NACA RM L54E20)

THE WAVE DRAG OF ARBITRARY CONFIGURATIONS IN LINEARIZED FLOW AS DETERMINED BY AREAS AND FORCES IN OBLIQUE PLANES. Harvard Lomax. March 1955. 16p. (NACA RM A55A18)

A SPECIAL METHOD FOR FINDING BODY DISTORTIONS THAT REDUCE THE WAVE DRAG OF WING AND BODY COMBINATIONS AT SUPERSONIC SPEEDS. Harvard Lomax and Max. A. Heaslet. May 1955. 113p. diagrs., tab. (NACA RM A55B16)

GENERAL THEORY OF WAVE-DRAG REDUCTION FOR COMBINATIONS EMPLOYING QUASI-CYLINDRICAL BODIES WITH AN APPLICATION TO SWEPT-WING AND BODY COMBINATIONS. Jack N. Nielsen. June 1955. 74p. diagrs. (NACA RM A55B07)

WING-BODY COMBINATIONS WITH CERTAIN GEOMETRIC RESTRAINTS HAVING LOW ZERO-LIFT WAVE DRAG AT LOW SUPERSONIC MACH NUMBERS. Harvard Lomax. February 1956. 32p. diagrs. (NACA TN 3667)

(1.7.2.1.1) Wing-Body

LARGE-SCALE FLIGHT MEASUREMENTS OF ZERO-LIFT DRAG AT MACH NUMBERS FROM 0.86 TO 1.5 OF A WING-BODY COMBINATION HAVING A 60° TRIANGULAR WING WITH NACA 65A003 SECTIONS. Robert L. Nelson. June 1, 1950. 10p. diagrs., photos., tab. (NACA RM L50D26)

LIFT AND PITCHING-MOMENT INTERFERENCE BETWEEN A POINTED CYLINDRICAL BODY AND TRIANGULAR WINGS OF VARIOUS ASPECT RATIOS AT MACH NUMBERS OF 1.50 AND 2.02. Jack N. Nielsen, Elliott D. Katzen, and Kenneth K. Tang. September 12, 1950. 53p. diagrs., photos., tabs. (NACA RM A50F06)

LARGE-SCALE FLIGHT MEASUREMENTS OF ZERO-LIFT DRAG AT MACH NUMBERS FROM 0.8 TO 1.6 OF A WING-BODY COMBINATION HAVING AN UNSWEPT 4.5-PERCENT-THICK WING WITH MODIFIED HEXAGONAL SECTIONS. Eugene D. Schult. March 23, 1951. 14p. diagrs., photos., tab. (NACA RM L51A15)

DRAG INTERFERENCE BETWEEN A POINTED CYLINDRICAL BODY AND TRIANGULAR WINGS OF VARIOUS ASPECT RATIOS AT MACH NUMBERS OF 1.50 AND 2.02. Elliott D. Katzen and George E. Kaattari. May 23, 1951. 45p. diagrs., photos., tabs. (NACA RM A51C27)

THE EFFECT ON ZERO-LIFT DRAG OF AN INDENTED FUSELAGE OR A THICKENED WING-ROOT MODIFICATION TO A 45° SWEPTBACK WING-BODY CONFIGURATION AS DETERMINED BY FLIGHT TESTS AT TRANSONIC SPEEDS. William B. Pepper. September 1951. 20p. diagrs., photos., 2 tabs. (NACA RM L51F15)

SOME EFFECTS OF FUSELAGE INTERFERENCE, WING INTERFERENCE AND SWEEPBACK ON THE DAMPING IN ROLL OF UNTAPERED WINGS AS DETERMINED BY TECHNIQUES EMPLOYING ROCKET-PROPELLED VEHICLES. William M. Bland, Jr., and Albert E. Dietz. October 1951. 27p. diagrs., photos. (NACA RM L51D25)

DAMPING IN ROLL OF STRAIGHT AND 45° SWEPT WINGS OF VARIOUS TAPER RATIOS DETERMINED AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS WITH ROCKET-POWERED MODELS. E. Claude Sanders, Jr. October 1951. 15p. diagrs. (NACA RM L51H14)

DAMPING IN ROLL OF MODELS WITH 45°, 60°, AND 70° DELTA WINGS DETERMINED AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS WITH ROCKET-POWERED MODELS. E. Claude Sanders, Jr. June 1952. 18p. diagrs., photos. (NACA RM L52D22a)

EFFECT OF FUSELAGE INTERFERENCE ON THE DAMPING IN ROLL OF DELTA WINGS OF ASPECT RATIO 4 IN THE MACH NUMBER RANGE BETWEEN 0.6 AND 1.6 AS DETERMINED WITH ROCKET-PROPELLED VEHICLES. William M. Bland, Jr. July 1952. 13p. diagrs., photos. (NACA RM L52E13)

THE EFFECTS OF FUSELAGE SIZE ON THE LOW-SPEED LONGITUDINAL AERODYNAMIC CHARACTERISTICS OF A THIN 60° DELTA WING WITH AND WITHOUT A DOUBLE SLOTTED FLAP. John M. Riebe. February 1953. 24p. diagrs., photo., tab. (NACA RM L52L29a)

LARGE-SCALE FLIGHT MEASUREMENTS OF ZERO-LIFT DRAG AND LOW-LIFT LONGITUDINAL CHARACTERISTICS OF A DIAMOND-WING—BODY COMBINATION AT MACH NUMBERS FROM 0.725 TO 1.54. Harvey A. Wallskog and John D. Morrow. April 1953. 18p. diagrs., photo., tab. (NACA RM L53C17)

EXPERIMENTAL INVESTIGATION OF THE EFFECTS OF PLAN-FORM TAPER ON THE AERODYNAMIC CHARACTERISTICS OF SYMMETRICAL UNSWEPT WINGS OF VARYING ASPECT RATIO. Edwin C. Allen. May 1953. 53p. diagrs., photos., tab. (NACA RM A53C19)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF THE EFFECT OF VARYING THE RATIO OF BODY DIAMETER TO WING SPAN FROM 0.1 TO 0.8 ON THE AERODYNAMIC CHARACTERISTICS IN PITCH OF A 45° SWEPTBACK-WING—BODY COMBINATION. Harold S. Johnson. November 1953. 32p. diagrs., photo., tab. (NACA RM L53J09a)

INVESTIGATION OF A CANARD MISSILE CONFIGURATION (NACA RM-4) IN THE LANGLEY 9-INCH SUPERSONIC TUNNEL AT MACH NUMBERS OF 1.62 AND 1.93. Carl E. Grigsby. June 1954. 24p. diagrs., photo. (NACA RM L54E20)

DOWNWASH SURVEY BEHIND TWO LOW-ASPECT-RATIO VARIABLE-INCIDENCE WINGS IN COMBINATION WITH THREE DIFFERENT SIZE FUSELAGES AT A MACH NUMBER OF 0.25. Edward J. Hopkins and Norman E. Sorensen. March 1955. 54p. diagrs., photos., tab. (NACA RM A55A07)

GENERAL THEORY OF WAVE-DRAG REDUCTION FOR COMBINATIONS EMPLOYING QUASI-CYLINDRICAL BODIES WITH AN APPLICATION TO SWEPT-WING AND BODY COMBINATIONS. Jack N. Nielsen. June 1955. 74p. diagrs. (NACA RM A55B07)

FLIGHT INVESTIGATION AT MACH NUMBERS FROM 0.6 TO 1.7 TO DETERMINE DRAG AND BASE PRESSURES ON A BLUNT-TRAILING-EDGE AIRFOIL AND DRAG OF DIAMOND AND CIRCULAR-ARC AIRFOILS AT ZERO LIFT. John D. Morrow and Ellis Katz. November 1955. 19p. diagrs., photos. (NACA TN 3548. Supersedes RM L50E19a)

MEASUREMENTS OF THE EFFECT OF TRAILING-EDGE THICKNESS ON THE ZERO-LIFT DRAG OF THIN LOW-ASPECT-RATIO WINGS. John D. Morrow. November 1955. 11p. diagrs., photo. (NACA TN 3550. Supersedes RM L50F26)

A THEORETICAL STUDY OF THE AERODYNAMICS OF SLENDER CRUCIFORM-WING ARRANGEMENTS AND THEIR WAKES. John R. Spreiter and Alvin H. Sacks. March 1956. i, 67p. diagrs., photos., tabs. (NACA TN 3528)

REDUCTION OF WAVE DRAG OF WING-BODY COMBINATIONS AT SUPERSONIC SPEEDS THROUGH BODY DISTORTIONS. William C. Pitts. April 1956. 9p. diagrs. (NACA RM A56B10)

THEORETICAL PRESSURE DISTRIBUTIONS FOR SOME SLENDER WING-BODY COMBINATIONS AT ZERO LIFT. Paul F. Byrd. April 1956. 39p. diagrs. (NACA TN 3674. Supersedes RM A54J07)

COMPARISON BETWEEN EXPERIMENTAL AND PREDICTED DOWNWASH AT A MACH NUMBER OF 0.25 BEHIND A WING-BODY COMBINATION HAVING A TRIANGULAR WING OF ASPECT RATIO 2.0. Norman E. Sorensen and Edward J. Hopkins. May 1956. 29p. diagrs., photos. (NACA TN 3720)

(1.7.2.1.2) Tail-Body

FLIGHT INVESTIGATIONS AT HIGH-SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS TO DETERMINE ZERO-LIFT DRAG OF FIN-STABILIZED BODIES OF REVOLUTION HAVING FINENESS RATIOS OF 12.5, 8.91, AND 6.04 AND VARYING POSITIONS OF MAXIMUM DIAMETER. Roger G. Hart and Ellis R. Katz. November 30, 1949. 36p. diagrs., photos. (NACA RM L9I30)

LARGE-SCALE FLIGHT MEASUREMENTS OF ZERO-LIFT DRAG AT MACH NUMBERS FROM 0.86 TO 1.5 OF A WING-BODY COMBINATION HAVING A 60° TRIANGULAR WING WITH NACA 65A003 SECTIONS. Robert L. Nelson. June 1, 1950. 10p. diagrs., photos., tab. (NACA RM L50D26)

AERODYNAMIC CHARACTERISTICS OF NACA RM-10 MISSILE IN 8- BY 6-FOOT SUPERSONIC WIND TUNNEL AT MACH NUMBERS FROM 1.49 TO 1.98. II - PRESENTATION AND ANALYSIS OF FORCE MEASUREMENTS. Fred T. Esenwein, Leonard J. Obery, and Carl F. Schueller. July 21, 1950. 34p. diagrs., photo. (NACA RM E50D28)

PRESSURE MEASUREMENTS ON A SHARPLY CONVERGING FUSELAGE AFTERBODY WITH JET ON AND OFF AT MACH NUMBERS FROM 0.8 TO 1.6. William E. Stoney, Jr., and Ellis Katz. August 10, 1950. 18p. diagrs., photos. (NACA RM L50F06)

LARGE-SCALE FLIGHT MEASUREMENTS OF ZERO-LIFT DRAG AT MACH NUMBERS FROM 0.8 TO 1.6 OF A WING-BODY COMBINATION HAVING AN UNSWEPT 4.5-PERCENT-THICK WING WITH MODIFIED HEXAGONAL SECTIONS. Eugene D. Schult. March 23, 1951. 14p. diagrs., photos., tab. (NACA RM L51A15)

AERODYNAMIC CHARACTERISTICS OF THE NACA RM-10 RESEARCH MISSILE IN THE AMES 1- BY 3-FOOT SUPERSONIC WIND TUNNEL NO. 2 - PRESSURE AND FORCE MEASUREMENTS AT MACH NUMBERS OF 1.52 AND 1.98. Edward W. Perkins, Forrest E. Gowen and Leland H. Jorgensen. September 1951. 37p. diagrs. (NACA RM A51G13)

PRESSURE DISTRIBUTIONS AT MACH NUMBERS FROM 0.6 TO 1.9 MEASURED IN FREE FLIGHT ON A PARABOLIC BODY OF REVOLUTION WITH SHARPLY CONVERGENT AFTERBODY. William E. Stoney, Jr. April 1952. 34p. diagrs., photos. (NACA RM L51L03)

EFFECT OF CAMBER AND TWIST ON THE STABILITY CHARACTERISTICS OF MODELS HAVING A 45° SWEPT WING AS DETERMINED BY THE FREE-FALL METHOD AT TRANSONIC SPEEDS. Maurice D. White. August 1952. 35p. diagrs., photos., tab. (NACA RM A52F16)

EFFECTS OF STABILIZING FINS AND A REAR-SUPPORT STING ON THE BASE PRESSURES OF A BODY OF REVOLUTION IN FREE FLIGHT AT MACH NUMBERS FROM 0.7 TO 1.3. Roger G. Hart. September 1952. 19p. diagrs., photos., tab. (NACA RM L52E06)

INVESTIGATION OF THE AERODYNAMIC CHARACTERISTICS OF THE NACA RM-10 MISSILE (WITH FINS) AT A MACH NUMBER OF 1.62 IN THE LANGLEY 9-INCH SUPERSONIC TUNNEL. Donald E. Coletti. December 1952. 21p. diagrs. (NACA RM L52J23a)

LARGE-SCALE FLIGHT MEASUREMENTS OF ZERO-LIFT DRAG AND LOW-LIFT LONGITUDINAL CHARACTERISTICS OF A DIAMOND-WING—BODY COMBINATION AT MACH NUMBERS FROM 0.725 TO 1.54. Harvey A. Wallskog and John D. Morrow. April 1953. 18p. diagrs., photo., tab. (NACA RM L53C17)

AN EXPERIMENTAL AND THEORETICAL INVESTIGATION AT HIGH SUBSONIC SPEEDS OF THE EFFECTS OF HORIZONTAL-TAIL HEIGHT ON THE AERODYNAMIC CHARACTERISTICS IN SIDESLIP OF AN UNSWEPT, UNTAPERED TAIL ASSEMBLY. Harleth G. Wiley and Donald R. Riley. December 1953. 71p. diagrs., tab. (NACA RM L53J19)

LONGITUDINAL STABILITY AND DRAG CHARACTERISTICS OF A FIN-STABILIZED BODY OF REVOLUTION WITH A FINENESS RATIO OF 12 AS MEASURED BY THE FREE-FALL METHOD. Max C. Kurbjun. June 1954. 19p. diagrs., photos., tab. (NACA RM L54E13)

INVESTIGATION OF A CANARD MISSILE CONFIGURATION (NACA RM-4) IN THE LANGLEY 9-INCH SUPERSONIC TUNNEL AT MACH NUMBERS OF 1.62 AND 1.93. Carl E. Grigsby. June 1954. 24p. diagrs., photo. (NACA RM L54E20)

AN INVESTIGATION OF THE CHARACTERISTICS OF THE NACA RM-10 (WITH AND WITHOUT FINS) IN THE LANGLEY 11-INCH HYPERSONIC TUNNEL AT A MACH NUMBER OF 6.9. William D. McCauley and William V. Feller. November 1954. 37p. diagrs., photos. (NACA RM L54I03)

(1.7.2.1.3) Jet Interference

AERODYNAMIC INVESTIGATION OF A PARABOLIC BODY OF REVOLUTION AT MACH NUMBER OF 1.92 AND SOME EFFECTS OF AN ANNULAR JET EXHAUSTING FROM THE BASE. Eugene S. Love. February 8, 1950. 75p. diagrs., photos., tab (NACA RM L9K09)

PRESSURE MEASUREMENTS ON A SHARPLY CONVERGING FUSELAGE AFTERBODY WITH JET ON AND OFF AT MACH NUMBERS FROM 0.8 TO 1.6. William E. Stoney, Jr., and Ellis Katz. August 10, 1950. 18p. diagrs., photos. (NACA RM L50F06)

PRELIMINARY INVESTIGATION OF EFFECTIVENESS OF BASE BLEED IN REDUCING DRAG OF BLUNT-BASE BODIES IN SUPERSONIC STREAM. Edgar M. Cortright, Jr., and Albert H. Schroeder. March 9, 1951. 23p. diagrs., photos. (NACA RM E51A26)

(1.7.2.1.4) Wing-Tail-Body

INVESTIGATION OF A THIN WING OF ASPECT RATIO 4 IN THE AMES 12-FOOT PRESSURE WIND TUNNEL. V - STATIC LONGITUDINAL STABILITY AND CONTROL THROUGHOUT THE SUBSONIC SPEED RANGE OF A SEMISPAN MODEL OF A SUPERSONIC AIRPLANE. Ben H. Johnson, Jr., and Francis W. Rollins. December 8, 1949. 130p. diagrs., photos. (NACA RM A9I01)

THE STATIC LONGITUDINAL CHARACTERISTICS AT MACH NUMBERS UP TO 0.95 OF A TRIANGULAR-WING CANARD MODEL HAVING A TRIANGULAR CONTROL. Jack D. Stephenson and Ralph Selan. December 1951. 72p. diagrs., photo. (NACA RM A51I07)

EFFECT OF CAMBER AND TWIST ON THE STABILITY CHARACTERISTICS OF MODELS HAVING A 45° SWEPT WING AS DETERMINED BY THE FREE-FALL METHOD AT TRANSONIC SPEEDS. Maurice D. White. August 1952. 35p. diagrs., photos., tab. (NACA RM A52F16)

LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF A CANARD MISSILE CONFIGURATION FOR MACH NUMBERS FROM 1.1 TO 1.93 AS DETERMINED FROM FREE-FLIGHT AND WIND-TUNNEL INVESTIGATIONS. Howard J. Curfman, Jr., and Carl E. Grigsby. August 1952. 28p. diagrs., tab. (NACA RM L52F06)

INVESTIGATION OF A CANARD MISSILE CONFIGURATION (NACA RM-4) IN THE LANGLEY 9-INCH SUPERSONIC TUNNEL AT MACH NUMBERS OF 1.62 AND 1.93. Carl E. Grigsby. June 1954. 24p. diagrs., photo. (NACA RM L54E20)

VORTEX INTERFERENCE ON SLENDER AIRPLANES. Alvin H. Sacks. November 1955. 19p. diagr. (NACA TN 3525)

DETERMINATION OF VORTEX PATHS BY SERIES EXPANSION TECHNIQUE WITH APPLICATION TO CRUCIFORM WINGS. Alberta Y. Alksne. April 1956. 40p. diagrs., photos. (NACA TN 3670)

(1.7.2.2) SPECIFIC MISSILES

FREE-FLIGHT INVESTIGATION OF CONTROL EFFECTIVENESS OF FULL-SPAN, 0.2-CHORD PLAIN AILERONS AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS TO DETERMINE SOME EFFECTS OF WING SWEEPBACK, TAPER, ASPECT RATIO, AND SECTION-THICKNESS RATIO. Carl A. Sandahl. August 13, 1947. 16p. diagrs., photos., tab. (NACA RM L7F30)

LOW-SPEED WIND-TUNNEL TESTS OF A PILOTLESS AIRCRAFT HAVING HORIZONTAL AND VERTICAL WINGS AND CRUCIFORM TAIL. N. Mastrocola and A. Assadourian. August 19, 1947. 100p. diagrs., photos., tab. (NACA RM L6J18a)

THE LONGITUDINAL STABILITY, CONTROL EFFECTIVENESS, AND CONTROL HINGE-MOMENT CHARACTERISTICS OBTAINED FROM A FLIGHT INVESTIGATION OF A CANARD MISSILE CONFIGURATION AT TRANSONIC AND SUPERSONIC SPEEDS. Roy J. Niewald and Martin T. Moul. November 24, 1950. 43p. diagrs., photos. (NACA RM L50I27)

LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS FROM A FLIGHT INVESTIGATION OF A CRUCIFORM CANARD MISSILE CONFIGURATION HAVING AN EXPOSED WING-CANARD AREA RATIO OF 16:1. Martin T. Moul and Andrew R. Wineman. June 1952. 32p. diagrs., photos. (NACA RM L52D24a)

LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF A CANARD MISSILE CONFIGURATION FOR MACH NUMBERS FROM 1.1 TO 1.93 AS DETERMINED FROM FREE-FLIGHT AND WIND-TUNNEL INVESTIGATIONS. Howard J. Curfman, Jr., and Carl E. Grigsby. August 1952. 28p. diagrs., tab. (NACA RM L52F06)

INVESTIGATION OF THE AERODYNAMIC CHARACTERISTICS OF THE NACA RM-10 MISSILE (WITH FINS) AT A MACH NUMBER OF 1.62 IN THE LANGLEY 9-INCH SUPERSONIC TUNNEL. Donald E. Coletti. December 1952. 21p. diagrs. (NACA RM L52J23a)

DRAG AND HEAT TRANSFER ON A PARABOLIC BODY OF REVOLUTION (NACA RM-10) IN FREE FLIGHT TO MACH NUMBER 2 WITH BOTH CONSTANT AND VARYING REYNOLDS NUMBER AND HEATING EFFECTS ON TURBULENT SKIN FRICTION. Joseph P. Maloney. June 1954. 34p. diagrs., photo. (NACA RM L54D06)

INVESTIGATION OF A CANARD MISSILE CONFIGURATION (NACA RM-4) IN THE LANGLEY 9-INCH SUPERSONIC TUNNEL AT MACH NUMBERS OF 1.62 AND 1.93. Carl E. Grigsby. June 1954. 24p. diagrs., photo. (NACA RM L54E20)

AN INVESTIGATION OF THE CHARACTERISTICS OF THE NACA RM-10 (WITH AND WITHOUT FINS) IN THE LANGLEY 11-INCH HYPERSONIC TUNNEL AT A MACH NUMBER OF 6.9. William D. McCauley and William V. Feller. November 1954. 37p. diagrs., photos. (NACA RM L54I03)

CORRELATION OF SUPERSONIC CONVECTIVE HEAT-TRANSFER COEFFICIENTS FROM MEASUREMENTS OF THE SKIN TEMPERATURE OF A PARABOLIC BODY OF REVOLUTION (NACA RM-10). Leo T. Chauvin and Carlos A. deMoraes. March 1956. 38p. diagrs., photo., tabs. (NACA TN 3623. Supersedes RM L51A18)

(1.7.3)
ROTATING-WING AIRCRAFT

SIMPLIFIED PROCEDURES AND CHARTS FOR THE RAPID ESTIMATION OF BENDING FREQUENCIES OF ROTATING BEAMS. Robert T. Yntema. June 1955. ii, 90p. diagrs., 6 tabs. (NACA TN 3459. Supersedes and extends RM L54G02)

PERFORMANCE ANALYSIS OF FIXED- AND FREE-TURBINE HELICOPTER ENGINES. Richard P. Krebs and William S. Miller, Jr. June 1956. 49p. diagrs. (NACA TN 3654)

(1.7.3.1)
AUTOGIROS

SUPPLEMENTARY CHARTS FOR ESTIMATING PERFORMANCE OF HIGH-PERFORMANCE HELICOPTERS. Robert J. Tapscott and Alfred Gessow. July 1955. 31p. diagrs. (NACA TN 3482)

CHARTS FOR ESTIMATING ROTOR-BLADE FLAPPING MOTION OF HIGH-PERFORMANCE HELICOPTERS. Robert J. Tapscott and Alfred Gessow. March 1956. 19p. diagrs. (NACA TN 3616)

(1.7.3.2)
HELICOPTERS

STUDIES OF THE SPEED STABILITY OF A TANDEM HELICOPTER IN FORWARD FLIGHT. Robert J. Tapscott and Kenneth B. Amer. August 1953. 35p. diagrs., photos., tab. (NACA RM L53F15a)

THE NORMAL COMPONENT OF THE INDUCED VELOCITY IN THE VICINITY OF A LIFTING ROTOR AND SOME EXAMPLES OF ITS APPLICATION. Walter Castles, Jr. and Jacob Henri De Leeuw, Georgia Institute of Technology. 1954. ii, 15p. diagrs., 3 tabs. (NACA Rept. 1184. Formerly TN 2912)

THEORETICAL AND EXPERIMENTAL INVESTIGATION OF MUFFLERS WITH COMMENTS ON ENGINE-EXHAUST MUFFLER DESIGN. Don D. Davis, Jr., George M. Stokes, Dewey Moore, and George L. Stevens, Jr. 1954. iv, 47p. diagrs., photos., tabs. (NACA Rept. 1192. Supersedes TN 2893; TN 2943)

METHOD FOR STUDYING HELICOPTER LONGITUDINAL MANEUVER STABILITY. Kenneth B. Amer. 1954, ii, 17p. diagrs., photos., tabs. (NACA Rept. 1200. Supersedes TN 3022)

STUDIES OF THE LATERAL-DIRECTIONAL FLYING QUALITIES OF A TANDEM HELICOPTER IN FORWARD FLIGHT. Kenneth B. Amer and Robert J. Tapscott. 1954. ii, 15p. diagrs., photos., tab. (NACA Rept. 1207. Supersedes TN 2984)

INVESTIGATION OF A PULSE-JET-POWERED HELICOPTER ROTOR ON THE LANGLEY HELICOPTER TEST TOWER. Edward J. Radin and Paul J. Carpenter. February 1954. 23p. diagrs., photos. (NACA RM L53L15)

METHODS FOR OBTAINING DESIRED HELICOPTER STABILITY CHARACTERISTICS. F. B. Gustafson and Robert J. Tapscott. August 1954. 12p. tabs. (NACA RM L54F30)

METHODS OF PREDICTING HELICOPTER STABILITY. Robert J. Tapscott and F. B. Gustafson. November 1954. 15p. diagrs. (NACA RM L54G05)

CHARTS FOR ESTIMATING TAIL-ROTOR CONTRIBUTION TO HELICOPTER DIRECTIONAL STABILITY AND CONTROL IN LOW-SPEED FLIGHT. Kenneth B. Amer and Alfred Gessow. 1955. ii, 22p. diagrs., photo., tabs. (NACA Rept. 1216. Supersedes TN 3156)

SUPPLEMENTARY CHARTS FOR ESTIMATING PERFORMANCE OF HIGH-PERFORMANCE HELICOPTERS. Robert J. Tapscott and Alfred Gessow. July 1955. 31p. diagrs. (NACA TN 3482)

GUST-TUNNEL INVESTIGATION OF THE EFFECT OF A SHARP-EDGE GUST ON THE FLAPWISE BLADE BENDING MOMENTS OF A MODEL HELICOPTER ROTOR. Domenic J. Maglieri and Thomas D. Reisert. August 1955. 24p. diagrs., photos. (NACA TN 3470)

NOTE ON HOVERING TURNS WITH TANDEM HELICOPTERS. John P. Reeder and Robert J. Tapscott. September 1955. 5p. photo. (NACA RM L55G21)

HELICOPTER INSTRUMENT FLIGHT AND PRECISION MANEUVERS AS AFFECTED BY CHANGES IN DAMPING IN ROLL, PITCH, AND YAW. James B. Whitten, John P. Reeder, and Almer D. Crim. November 1955. 14p. diagrs., photos. (NACA TN 3537)

INVESTIGATION OF THE PROPULSIVE CHARACTERISTICS OF A HELICOPTER-TYPE PULSE-JET ENGINE OVER A RANGE OF MACH NUMBERS AND ANGLE OF YAW. Paul J. Carpenter, James P. Shivers, and Edwin E. Lee, Jr. January 1956. 24p. diagrs., photos. (NACA TN 3625)

EFFECT OF TRANSVERSE BODY FORCE ON CHANNEL FLOW WITH SMALL HEAT ADDITION. Simon Ostrach and Franklin K. Moore. February 1956. 31p. diagrs. (NACA TN 3594)

CHARTS FOR ESTIMATING ROTOR-BLADE FLAPPING MOTION OF HIGH-PERFORMANCE HELICOPTERS. Robert J. Tapscott and Alfred Gessow. March 1956. 19p. diagrs. (NACA TN 3616)

WIND-TUNNEL INVESTIGATION OF EFFECTS OF FUSELAGE CROSS-SECTIONAL SHAPE, FUSELAGE BEND, AND VERTICAL-TAIL SIZE ON DIRECTIONAL CHARACTERISTICS OF NONOVERLAP-TYPE HELICOPTER FUSELAGE MODELS WITHOUT ROTORS. James L. Williams. March 1956. 39p. diagrs., photos. (NACA TN 3645)

NORMAL COMPONENT OF INDUCED VELOCITY IN THE VICINITY OF A LIFTING ROTOR WITH A NONUNIFORM DISK LOADING. Harry H. Heyson and S. Katzoff. April 1956. i, 45p. diagrs. (NACA TN 3690)

ANALYSIS AND COMPARISON WITH THEORY OF FLOW-FIELD MEASUREMENTS NEAR A LIFTING ROTOR IN THE LANGLEY FULL-SCALE TUNNEL. Harry H. Heyson. April 1956. 162p. diagrs., photos., tab. (NACA TN 3691)

(1.7.6)
BI-PLANES AND TRI-PLANES

PRELIMINARY INVESTIGATION AT SUBSONIC AND TRANSONIC SPEEDS OF THE AERODYNAMIC CHARACTERISTICS OF A BIPLANE COMPOSED OF A SWEPTBACK AND A SWEPTFORWARD WING JOINED AT THE TIPS. Jones F. Cahill and Dexter H. Stead. March 1954. 19p. diagrs., photos. (NACA RM L53L24b)

(1.8)
Stability and Control

SOME FACTORS AFFECTING AUTOMATIC CONTROL OF AIRPLANES. Charles W. Mathews. February 1952. 15p. diagrs. (NACA RM L52A30)

STUDIES OF THE SPEED STABILITY OF A TANDEM HELICOPTER IN FORWARD FLIGHT. Robert J. Tapscott and Kenneth B. Amer. August 1953. 35p. diagrs., photos., tab. (NACA RM L53F15a)

METHOD FOR STUDYING HELICOPTER LONGITUDINAL MANEUVER STABILITY. Kenneth B. Amer. 1954, ii, 17p. diagrs., photos., tabs. (NACA Rept. 1200. Supersedes TN 3022)

STUDIES OF THE LATERAL-DIRECTIONAL FLYING QUALITIES OF A TANDEM HELICOPTER IN FORWARD FLIGHT. Kenneth B. Amer and Robert J. Tapscott. 1954. ii, 15p. diagrs., photos., tab. (NACA Rept. 1207. Supersedes TN 2984)

METHODS FOR OBTAINING DESIRED HELICOPTER STABILITY CHARACTERISTICS. F. B. Gustafson and Robert J. Tapscott. August 1954. 12p. tabs. (NACA RM L54F30)

METHODS OF PREDICTING HELICOPTER STABILITY. Robert J. Tapscott and F. B. Gustafson. November 1954. 15p. diagrs. (NACA RM L54G05)

HELICOPTER INSTRUMENT FLIGHT AND PRECISION MANEUVERS AS AFFECTED BY CHANGES IN DAMPING IN ROLL, PITCH, AND YAW. James B. Whitten, John P. Reeder, and Almer D. Crim. November 1955. 14p. diagrs., photos. (NACA TN 3537)

(1.8.1)
STABILITY

VORTEX INTERFERENCE ON SLENDER AIRPLANES. Alvin H. Sacks. November 1955. 19p. diagr. (NACA TN 3525)

ACOUSTIC ANALYSIS OF RAM-JET BUZZ. Harold Mirels. November 1955. 33p diagrs. (NACA TN 3574)

(1.8.1.1)
STATIC

DOWNWASH AND SIDEWASH FIELDS BEHIND CRUCIFORM WINGS. John R. Spreiter. January 1952. 18p. photos., diagrs. (NACA RM A51L17)

EFFECTS OF STABILIZING FINS AND A REAR-SUPPORT STING ON THE BASE PRESSURES OF A BODY OF REVOLUTION IN FREE FLIGHT AT MACH NUMBERS FROM 0.7 TO 1.3. Roger G. Hart. September 1952. 19p. diagrs., photos., tab. (NACA RM L52E06)

LARGE-SCALE LOW-SPEED WIND-TUNNEL TESTS OF A MODEL HAVING A 60° DELTA HORIZONTAL CANARD CONTROL SURFACE AND WING TO OBTAIN STATIC-LONGITUDINAL-STABILITY AND CANARD-SURFACE HINGE-MOMENT DATA. Dale L. Burrows. June 1954. 21p. diagrs. (NACA RM L54D16a)

(1.8.1.1.1)
Longitudinal

LOW-SPEED WIND-TUNNEL TESTS OF A PILOTLESS AIRCRAFT HAVING HORIZONTAL AND VERTICAL WINGS AND CRUCIFORM TAIL. N. Mastrocola and A. Assadourian. August 19, 1947. 100p. diagrs., photos., tab. (NACA RM L6J18a)

THE HIGH-SPEED AERODYNAMIC EFFECTS OF MODIFICATIONS TO THE WING AND WING-FUSELAGE INTERSECTION OF AN AIRPLANE MODEL WITH THE WING SWEPT BACK 35°. Lee E. Boddy and Charles P. Morrill, Jr. February 18, 1948. 34p. diagrs., photos. (NACA RM A7J02)

HIGH-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A FIGHTER AIRPLANE MODEL WITH A SWEPT-BACK WING AND TAIL. Charles P. Morrill, Jr., and Lee E. Boddy. April 14, 1948. 47p. diagrs., photos. (NACA RM A7K28)

THE AERODYNAMIC EFFECTS OF ROCKETS AND FUEL TANKS MOUNTED UNDER THE SWEPT-BACK WING OF AN AIRPLANE MODEL. Lee E. Boddy and Charles P. Morrill, Jr. April 23. 1948. 19p. diagrs. (NACA RM A7J03)

LONGITUDINAL STABILITY CHARACTERISTICS OF A 42° SWEPTBACK WING AND TAIL COMBINATION AT A REYNOLDS NUMBER OF 6.8×10^{6}. Stanley H. Spooner and Albert P. Martina. July 22, 1948. 44p. diagrs., photos., 2 tabs. (NACA RM L8E12)

PRELIMINARY RESULTS OF NACA TRANSONIC FLIGHTS OF THE XS-1 AIRPLANE WITH 10-PERCENT-THICK WING AND 8-PERCENT-THICK HORIZONTAL TAIL. Hubert M. Drake, Harold R. Goodman, and Herbert H. Hoover. October 13, 1948. 18p. diagrs., photos. (NACA RM L8I29)

(1) AERODYNAMICS

EFFECTS OF A SWEPTBACK HYDROFOIL ON THE FORCE AND LONGITUDINAL STABILITY CHARACTERISTICS OF A TYPICAL HIGH-SPEED AIRPLANE. Raymond B. Wood. December 2, 1948. 19p. diagrs., photo., tabs. (NACA RM L8I30a)

LONGITUDINAL-STABILITY INVESTIGATION OF HIGH-LIFT AND STALL-CONTROL DEVICES ON A 52° SWEPTBACK WING WITH AND WITHOUT FUSELAGE AND HORIZONTAL TAIL AT A REYNOLDS NUMBER OF 6.8×10^6. Gerald V. Foster and James E. Fitzpatrick. December 20, 1948. 41p. diagrs., photos., tabs. (NACA RM L8I08)

INVESTIGATION AT A MACH NUMBER OF 1.9 AND A REYNOLDS NUMBER OF 2.2×10^6 OF SEVERAL FLAP-TYPE LATERAL-CONTROL DEVICES ON A WING HAVING 42.7° SWEEPBACK OF THE LEADING EDGE. Kennith L. Goin. March 11, 1949. 28p. diagrs., photos., tabs. (NACA RM L9A18a)

EFFECTS OF HIGH-LIFT AND STALL-CONTROL DEVICES, FUSELAGE, AND HORIZONTAL TAIL ON A WING SWEPT BACK 42° AT THE LEADING EDGE AND HAVING SYMMETRICAL CIRCULAR-ARC AIRFOIL SECTIONS AT A REYNOLDS NUMBER OF 6.9×10^6. Robert L. Woods and Stanley H. Spooner. April 20, 1949. 42p. diagrs., photos., tabs. (NACA RM L9B11)

LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF A SEMISPAN WIND-TUNNEL MODEL OF A TAILLESS AIRPLANE AND A COMPARISON WITH COMPLETE-MODEL WIND-TUNNEL TESTS AND SEMISPAN-MODEL WING-FLOW TESTS. Kenneth W. Goodson and Thomas J. King, Jr. October 10, 1949. 63p. diagrs., photos. (NACA RM L9C31)

A STUDY OF SEVERAL FACTORS AFFECTING THE STABILITY CONTRIBUTED BY A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS ON A SWEPTBACK-WING AIRPLANE MODEL. Gerald V. Foster and Roland F. Griner. October 28, 1949. 28p. diagrs., tab. (NACA RM L9H19)

INVESTIGATION OF A THIN WING OF ASPECT RATIO 4 IN THE AMES 12-FOOT PRESSURE WIND TUNNEL. V - STATIC LONGITUDINAL STABILITY AND CONTROL THROUGHOUT THE SUBSONIC SPEED RANGE OF A SEMISPAN MODEL OF A SUPERSONIC AIRPLANE. Ben H. Johnson, Jr., and Francis W. Rollins. December 8, 1949. 130p. diagrs., photos. (NACA RM A9I01)

AERODYNAMIC CHARACTERISTICS AND FLYING QUALITIES OF A TAILLESS TRIANGULAR-WING AIRPLANE CONFIGURATION AS OBTAINED FROM FLIGHTS OF ROCKET-PROPELLED MODELS AT TRANSONIC AND LOW SUPERSONIC SPEEDS. Grady L. Mitcham, Joseph E. Stevens, and Harry P. Norris. February 9, 1950. 67p. diagrs., photos., tabs. (NACA RM L9L07)

INVESTIGATION OF DOWNWASH AND WAKE CHARACTERISTICS AT A MACH NUMBER OF 1.53. III - SWEPT WINGS. Edward W. Perkins and Thomas N. Canning. February 23, 1950. 41p. diagrs., tab. (NACA RM A9K02)

THE TRANSONIC CHARACTERISTICS OF A LOW-ASPECT-RATIO TRIANGULAR WING WITH A CONSTANT-CHORD FLAP AS DETERMINED BY WING-FLOW TESTS, INCLUDING CORRELATION WITH LARGE-SCALE TESTS. George A. Rathert, Jr., L. Stewart Rolls, and Carl M. Hanson. July 18, 1950. 39p. diagrs., photo. (NACA RM A50E10)

A TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. WING-FUSELAGE CONFIGURATION WITH A WING OF 45° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Robert S. Osborne. October 10, 1950. 49p. diagrs., photos. (NACA RM L50H08)

ELEVATOR-STABILIZER EFFECTIVENESS AND TRIM OF THE X-1 AIRPLANE TO A MACH NUMBER OF 1.06. Hubert M. Drake and John R. Carden. November 1, 1950. 12p. diagrs. (NACA RM L50G20)

A TRANSONIC WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. WING-FUSELAGE CONFIGURATION HAVING A WING OF 35° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Beverly Z. Henry, Jr. November 15, 1950. 40p. diagrs., photo., tab. (NACA RM L50J09)

THE LONGITUDINAL STABILITY, CONTROL EFFECTIVENESS, AND CONTROL HINGE-MOMENT CHARACTERISTICS OBTAINED FROM A FLIGHT INVESTIGATION OF A CANARD MISSILE CONFIGURATION AT TRANSONIC AND SUPERSONIC SPEEDS. Roy J. Niewald and Martin T. Moul. November 24, 1950. 43p. diagrs., photos. (NACA RM L50I27)

HORIZONTAL-TAIL EFFECTIVENESS AND DOWNWASH SURVEYS FOR TWO 47.7° SWEPTBACK WING-FUSELAGE COMBINATIONS WITH ASPECT RATIOS OF 5.1 AND 6.0 AT A REYNOLDS NUMBER OF 6.0×10^6. Reino J. Salmi. January 12, 1951. 65p. diagrs., photos., 2 tabs. (NACA RM L50K06)

A TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. WING-FUSELAGE CONFIGURATION HAVING A WING OF 60° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Raymond B. Wood and Frank F. Fleming. January 24, 1951. 43p. diagrs., photo. (NACA RM L50J25)

AERODYNAMIC CHARACTERISTICS INCLUDING PRESSURE DISTRIBUTIONS OF A FUSELAGE AND THREE COMBINATIONS OF THE FUSELAGE WITH SWEPT-BACK WINGS AT HIGH SUBSONIC SPEEDS. Fred B. Sutton and Andrew Martin. February 6, 1951. 117p. diagrs., photos., tabs. (NACA RM A50J26a)

LOW-SPEED LONGITUDINAL AND WAKE AIR-FLOW CHARACTERISTICS AT A REYNOLDS NUMBER OF 6.0×10^6 OF A 52° SWEPTBACK WING EQUIPPED WITH VARIOUS SPANS OF LEADING-EDGE AND TRAILING-EDGE FLAPS, A FUSELAGE, AND A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS. Roland F. Griner and Gerald V. Foster. February 28, 1951. 66p. diagrs., photo., 3 tabs. (NACA RM L50K29)

INVESTIGATION OF THE EFFECTS OF GEOMETRIC CHANGES IN AN UNDERWING PYLON-SUSPENDED EXTERNAL-STORE INSTALLATION ON THE AERODYNAMIC CHARACTERISTICS OF A 45° SWEPTBACK WING AT HIGH SUBSONIC SPEEDS. Kenneth P. Spreemann and William J. Alford, Jr. March 5, 1951. 91p. diagrs., photos., tabs. (NACA RM L50L12)

FLIGHT INVESTIGATION OF A ROLL-STABILIZED MISSILE CONFIGURATION AT VARYING ANGLES OF ATTACK AT MACH NUMBERS BETWEEN 0.8 AND 1.79. Jacob Zarovsky and Robert A. Gardiner. March 6, 1951. 38p. diagrs., photos., tab. (NACA RM L50H21)

A TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. WING-FUSELAGE CONFIGURATION HAVING A WING OF 0° SWEEPBACK, ASPECT RATIO 4.0, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Maurice S. Cahn and Carroll R. Bryan. March 6, 1951. 37p. diagrs., photos. (NACA RM L51A02)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 2 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL-LONGITUDINAL CHARACTERISTICS. David Graham and David G. Koenig. April 23, 1951. 35p. diagrs., photo., 3 tabs. (NACA RM A51B21)

AERODYNAMIC CHARACTERISTICS OF FOUR WINGS OF SWEEPBACK ANGLES 0°, 35°, 45°, AND 60°, NACA 65A006 AIRFOIL SECTION, ASPECT RATIO 4, AND TAPER RATIO 0.6 IN COMBINATION WITH A FUSELAGE AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. Arvo A. Luoma. June 6, 1951. 59p. diagrs., photo., tab. (NACA RM L51D13)

LOW-SPEED LONGITUDINAL AND WAKE AIR-FLOW CHARACTERISTICS AT A REYNOLDS NUMBER OF 5.5×10^6 OF A CIRCULAR-ARC 52° SWEPTBACK WING WITH A FUSELAGE AND A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS. Gerald V. Foster and Roland F. Griner. June 19, 1951. 44p. diagrs., tabs. (NACA RM L51C30)

AN ANALYSIS OF THE EFFECTS OF AEROELASTICITY ON STATIC LONGITUDINAL STABILITY AND CONTROL OF A SWEPT-BACK-WING AIRPLANE. Richard B. Skoog. August 1951. 45p. diagrs. (NACA RM A51C19)

INVESTIGATION OF THE EFFECTS OF TWIST AND CAMBER ON THE AERODYNAMIC CHARACTERISTICS OF A 50° 38' SWEPTBACK WING OF ASPECT RATIO 2.98. TRANSONIC-BUMP METHOD. Kenneth P. Spreemann and William J. Alford, Jr. August 1951. 33p. diagrs., photos., tab. (NACA RM L51C16)

INVESTIGATION OF THE EFFECT OF A NACELLE AT VARIOUS CHORDWISE AND VERTICAL POSITIONS ON THE AERODYNAMIC CHARACTERISTICS AT HIGH SUBSONIC SPEEDS OF A 45° SWEPTBACK WING WITH AND WITHOUT A FUSELAGE. H. Norman Silvers, Thomas J. King, Jr., and Thomas B. Pasteur, Jr. September 1951. 71p. diagrs., photos., 3 tabs. (NACA RM L51H16)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 4 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LONGITUDINAL CHARACTERISTICS. David Graham and David G. Koenig. October 1951. 27p. diagrs., photo., 4 tabs. (NACA RM A51H10a)

ADDITIONAL STUDIES OF THE STABILITY AND CONTROLLABILITY OF AN UNSWEPT-WING VERTICALLY RISING AIRPLANE MODEL IN HOVERING FLIGHT INCLUDING STUDIES OF VARIOUS TETHERED LANDING TECHNIQUES. William R. Bates, Powell M. Lovell, Jr., and Charles C. Smith, Jr. November 1951. 25p. diagrs., photos., tab. (NACA RM L51I07a)

THE STATIC LONGITUDINAL CHARACTERISTICS AT MACH NUMBERS UP TO 0.95 OF A TRIANGULAR-WING CANARD MODEL HAVING A TRIANGULAR CONTROL. Jack D. Stephenson and Ralph Selan. December 1951. 72p. diagrs., photo. (NACA RM A51I07)

EFFECT OF VERTICAL LOCATION OF A HORIZONTAL TAIL ON THE STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A 45° SWEPTBACK-WING - FUSELAGE COMBINATION OF ASPECT RATIO 8 AT A REYNOLDS NUMBER OF 4.0×10^6. Reino J. Salmi and William A. Jacques. January 1952. 42p. diagrs., photos. (NACA RM L51J08)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 2 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LATERAL CHARACTERISTICS. David Graham and David G. Koenig. February 1952. 38p. diagrs., 2 tabs. (NACA RM A51L03)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF A TWISTED AND CAMBERED WING SWEPT BACK 63° WITH VORTEX GENERATORS AND FENCES. James A. Weiberg and George B. McCullough. March 1952. 45p. diagrs., photos., 3 tabs. (NACA RM A52A17)

WIND-TUNNEL INVESTIGATION OF THE AERODYNAMIC CHARACTERISTICS IN PITCH OF WING-FUSELAGE COMBINATIONS AT HIGH SUBSONIC SPEEDS. ASPECT-RATIO SERIES. Richard E. Kuhn and James W. Wiggins. April 1952. 42p. diagrs., photos., tab. (NACA RM L52A29)

AN INVESTIGATION THROUGHOUT THE SUBSONIC SPEED RANGE OF A FULL-SPAN AND A SEMI-SPAN MODEL OF A PLANE WING AND OF A CAMBERED AND TWISTED WING, ALL HAVING 45° OF SWEEPBACK. Harry H. Shibata, Angelo Bandettini, and Joseph Cleary. June 1952. 65p. diagrs., photos. (NACA RM A52D01)

LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS FROM A FLIGHT INVESTIGATION OF A CRUCIFORM CANARD MISSILE CONFIGURATION HAVING AN EXPOSED WING-CANARD AREA RATIO OF 16:1. Martin T. Moul and Andrew R. Wineman. June 1952. 32p. diagrs., photos. (NACA RM L52D24a)

WIND-TUNNEL INVESTIGATION OF THE AERODYNAMIC CHARACTERISTICS IN PITCH OF WING-FUSELAGE COMBINATIONS AT HIGH-SUBSONIC SPEEDS. SWEEP SERIES. James W. Wiggins and Richard E. Kuhn. July 1952. 41p. diagrs., photos. (NACA RM L52D18)

EFFECT OF CAMBER AND TWIST ON THE STABILITY CHARACTERISTICS OF MODELS HAVING A 45° SWEPT WING AS DETERMINED BY THE FREE-FALL METHOD AT TRANSONIC SPEEDS. Maurice D. White. August 1952. 35p. diagrs., photos., tab. (NACA RM A52F16)

LONGITUDINAL STABILITY, TRIM, AND DRAG CHARACTERISTICS OF A ROCKET-PROPELLED MODEL OF AN AIRPLANE CONFIGURATION HAVING A 45° SWEPTBACK WING AND AN UNSWEPT HORIZONTAL TAIL. James H. Parks and Alan B. Kehlet. August 1952. 29p. diagrs., photos., tab. (NACA RM L52F05)

LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF A CANARD MISSILE CONFIGURATION FOR MACH NUMBERS FROM 1.1 TO 1.93 AS DETERMINED FROM FREE-FLIGHT AND WIND-TUNNEL INVESTIGATIONS. Howard J. Curfman, Jr., and Carl E. Grigsby. August 1952. 28p. diagrs., tab. (NACA RM L52F06)

PRELIMINARY RESULTS OF HORIZONTAL-TAIL LOAD MEASUREMENTS OF THE BELL X-5 RESEARCH AIRPLANE. John T. Rogers and Angel H. Dunn. August 15, 1952. 22p. diagrs., photos., tabs. (NACA RM L52G14)

THE USE OF LEADING-EDGE AREA SUCTION TO INCREASE THE MAXIMUM LIFT COEFFICIENT OF A 35° SWEPT-BACK WING. Curt A. Holzhauser and Robert K. Martin. September 1952. 37p. diagrs., photo., 3 tabs. (NACA RM A52G17)

A CORRELATION WITH FLIGHT TESTS OF RESULTS OBTAINED FROM THE MEASUREMENT OF WING PRESSURE DISTRIBUTIONS ON A 1/4-SCALE MODEL OF THE X-1 AIRPLANE (10-PERCENT-THICK WING). Jack F. Runckel and James H. Henderson. September 1952. 60p. diagrs., photos., tab. (NACA RM L52E29)

INVESTIGATION OF THE LOW-SPEED AERODYNAMIC CHARACTERISTICS OF A VARIABLE-SWEEP AIRPLANE MODEL WITH A WING HAVING PARTIAL-SPAN CAMBERED-LEADING-EDGE MODIFICATIONS. Robert E. Becht and Andrew L. Byrnes, Jr. September 1952. 47p. diagrs., photos. (NACA RM L52G08a)

THE EFFECTS OF SWEEPBACK ON LONGITUDINAL CHARACTERISTICS OF A 1/30-SCALE SEMISPAN MODEL OF THE BELL X-5 AIRPLANE AS DETERMINED FROM NACA WING-FLOW TESTS AT TRANSONIC SPEEDS. Joseph J. Kolnick and Robert M. Kennedy. November 1952. 48p. diagrs., photos., tab. (NACA RM L52I23)

THE LONGITUDINAL CHARACTERISTICS AT MACH NUMBERS UP TO 0.9 OF A WING-FUSELAGE-TAIL COMBINATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. Bruce E. Tinling. December 1952. 41p. diagrs., photo., tab. (NACA RM A52I19)

EFFECTS OF TWIST AND CAMBER, FENCES, AND HORIZONTAL-TAIL HEIGHT ON THE LOW-SPEED LONGITUDINAL STABILITY CHARACTERISTICS OF A WING-FUSELAGE COMBINATION WITH A 45° SWEPTBACK WING OF ASPECT RATIO 8 AT A REYNOLDS NUMBER OF 4.0×10^6. Gerald V. Foster. December 1952. 30p. diagrs., photo. (NACA RM L52J03)

LONGITUDINAL-CONTROL EFFECTIVENESS AND DOWNWASH CHARACTERISTICS AT TRANSONIC SPEEDS OF A 1/30-SCALE SEMISPAN MODEL OF THE BELL X-5 AIRPLANE AS DETERMINED BY THE NACA WING-FLOW METHOD. Norman S. Silsby and Garland J. Morris. January 1953. 48p. diagrs., photos., 2 tabs. (NACA RM L52K12)

INVESTIGATION OF THE EFFECT OF CHORDWISE POSITIONING AND SHAPE OF AN UNDERWING NACELLE ON THE HIGH-SPEED AERODYNAMIC CHARACTERISTICS OF A 45° SWEPTBACK TAPERED-IN-THICKNESS-RATIO WING OF ASPECT RATIO 6. H. Norman Silvers and Thomas J. King, Jr. January 1953. 50p. diagrs. (NACA RM L52K25)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE MODEL WITH AN ASPECT RATIO 4 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - HIGH-LIFT DEVICES AND LATERAL CONTROLS. Ralph W. Franks. February 1953. 45p. diagrs., photo., 2 tabs. (NACA RM A52K13)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF TWO AIRPLANE MODELS HAVING ASPECT RATIO 2 TRAPEZOIDAL WINGS OF TAPER RATIOS 0.33 AND 0.20. Ralph W. Franks. February 1953. 56p. diagrs., photos., 3 tabs. (NACA RM A52L16)

A FLIGHT INVESTIGATION OF THE EFFECT OF LEADING-EDGE CAMBER ON THE AERODYNAMIC CHARACTERISTICS OF A SWEPT-WING AIRPLANE. Seth B. Anderson, Frederick H. Matteson, and Rudolph D. Van Dyke, Jr. February 1953. 23p. diagrs., photos., tab. (NACA RM A52L16a)

PRELIMINARY RESULTS OF STABILITY AND CONTROL INVESTIGATION OF THE BELL X-5 RESEARCH AIRPLANE. Thomas W. Finch and Donald W. Briggs. February 1953. 35p. diagrs., photos., tabs. (NACA RM L52K18b)

THE EFFECTS OF FUSELAGE SIZE ON THE LOW-SPEED LONGITUDINAL AERODYNAMIC CHARACTERISTICS OF A THIN 60° DELTA WING WITH AND WITHOUT A DOUBLE SLOTTED FLAP. John M. Riebe. February 1953. 24p. diagrs., photo., tab. (NACA RM L52L29a)

FLIGHT DETERMINATION OF THE STATIC LONGITUDINAL STABILITY BOUNDARIES OF THE BELL X-5 RESEARCH AIRPLANE WITH 59° SWEEPBACK. Thomas W. Finch and Joseph A. Walker. February 1953. 51p. diagrs., photo., tab. (NACA RM L53A09b)

LOW-SPEED LONGITUDINAL CHARACTERISTICS OF AN UNSWEPT HEXAGONAL WING WITH AND WITHOUT A FUSELAGE AND A HORIZONTAL TAIL LOCATED AT VARIOUS POSITIONS AT REYNOLDS NUMBERS FROM 2.8 x 10^6 TO 7.6 x 10^6. Gerald V. Foster, Ernst F. Mollenberg, and Robert L. Woods. February 26, 1953. 63p. diagrs., photos., 3 tabs. (NACA RM L52L11b)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 3 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LONGITUDINAL AND LATERAL CHARACTERISTICS. David G. Koenig. April 1953. 61p. diagrs., photos., 4 tabs. (NACA RM A52L15)

INVESTIGATION OF THE EFFECTS OF WING AND TAIL MODIFICATIONS ON THE LOW-SPEED STABILITY CHARACTERISTICS OF A MODEL HAVING A THIN 40° SWEPT WING OF ASPECT RATIO 3.5. Joseph Weil, William C. Sleeman, Jr., and Andrew L. Byrnes, Jr. April 1953. 95p. diagrs., photos., tab. (NACA RM L53C09)

WIND-TUNNEL INVESTIGATION AT HIGH SUBSONIC SPEEDS OF A SPOILER-SLOT-DEFLECTOR COMBINATION ON AN NACA 65A006 WING WITH QUARTER-CHORD LINE SWEPT BACK 32.6°. Raymond D. Vogler. May 1953. 24p. diagrs. (NACA RM L53D17)

THE EFFECTS OF NACELLES AND OF EXTENDED SPLIT FLAPS ON THE LONGITUDINAL CHARACTERISTICS OF A WING-FUSELAGE-TAIL COMBINATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. Bruce E. Tinling and Armando E. Lopez. June 1953. 47p. diagrs., tab. (NACA RM A53D06)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH A VARIABLE-INCIDENCE TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL. David G. Koenig. June 1953. 42p. diagrs., photo., tabs. (NACA RM A53D21)

INVESTIGATION AT LOW SPEED OF THE FLOW FIELD BEHIND THE LIFTING SURFACES OF A MODEL EQUIPPED WITH A 60° TRIANGULAR WING AND A 60° TRIANGULAR CANARD TAIL. Ernest E. Newman and Jones F. Cahill. June 1953. 44p. diagrs., photos., tab. (NACA RM L53C30)

LONGITUDINAL STABILITY AND WAKE-FLOW CHARACTERISTICS OF A TWISTED AND CAMBERED WING-FUSELAGE COMBINATION OF 45° SWEEPBACK AND ASPECT RATIO 8 WITH A HORIZONTAL TAIL AND STALL-CONTROL DEVICES AT A REYNOLDS NUMBER OF 4.0 x 10^6. Gerald V. Foster. June 1953. 51p. diagrs., photos., tab. (NACA RM L53D08)

EFFECTS OF HORIZONTAL-TAIL HEIGHT AND A WING LEADING-EDGE MODIFICATION CONSISTING OF A FULL-SPAN FLAP AND A PARTIAL-SPAN CHORD-EXTENSION ON THE AERODYNAMIC CHARACTERISTICS IN PITCH AT HIGH SUBSONIC SPEEDS OF A MODEL WITH A 45° SWEPTBACK WING. William D. Morrison, Jr. and William J. Alford, Jr. June 1953. 37p. diagrs., photo., tab. (NACA RM L53E06)

WIND-TUNNEL INVESTIGATION OF THE AERODYNAMIC CHARACTERISTICS IN PITCH OF WING-FUSELAGE COMBINATIONS AT HIGH SUBSONIC SPEEDS. TAPER-RATIO SERIES. Thomas J. King, Jr. and Thomas B. Pasteur, Jr. June 1953. 37p. diagrs., photos., tab. (NACA RM L53E20)

WIND-TUNNEL INVESTIGATION OF THE EFFECTS OF GEOMETRIC DIHEDRAL ON THE AERODYNAMIC CHARACTERISTICS IN PITCH AND SIDESLIP OF AN UNSWEPT- AND A 45° SWEPTBACK-WING-FUSELAGE COMBINATION AT HIGH SUBSONIC SPEEDS. Richard E. Kuhn and John W. Draper. July 1953. 41p. diagrs., photos. (NACA RM L53F09)

THE EFFECTS OF LEADING-EDGE EXTENSIONS, A TRAILING-EDGE EXTENSION, AND A FENCE ON THE STATIC LONGITUDINAL STABILITY OF A WING-FUSELAGE-TAIL COMBINATION HAVING A WING WITH 35° OF SWEEPBACK AND AN ASPECT RATIO OF 4.5. Ralph Selan and Angelo Bandettini. August 1953. 81p. diagrs., photos., tabs. (NACA RM A53E12)

THE EFFECTS OF FENCES ON THE HIGH-SPEED LONGITUDINAL STABILITY OF A SWEPT-WING AIRPLANE. Richard S. Bray. August 1953. 37p. diagrs., photos., tabs. (NACA RM A53F23)

LONGITUDINAL FLIGHT CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 59° SWEEPBACK WITH MODIFIED WING ROOTS. James A. Martin. August 1953. 25p. diagrs., photos., tab. (NACA RM L53E28)

EFFECT OF REDUCTION IN THICKNESS FROM 6 TO 2 PERCENT AND REMOVAL OF THE POINTED TIPS ON THE SUBSONIC STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A 60° TRIANGULAR WING IN COMBINATION WITH A FUSELAGE. William E. Palmer. August 1953. 44p. diagrs., photo., tab. (NACA RM L53F24)

A TRANSONIC WIND-TUNNEL INVESTIGATION OF THE LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF A 0.09-SCALE MODEL OF THE BELL X-5 RESEARCH AIRPLANE AND COMPARISON WITH FLIGHT. Ralph P. Bielat and George S. Campbell. October 1953. 65p. diagrs., photo. (NACA RM L53H18)

FREE-FLIGHT-TUNNEL INVESTIGATION OF THE LOW-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A CANARD AIRPLANE MODEL. Joseph L. Johnson, Jr., and John W. Paulson. October 1953. 37p. diagrs., photo., 2 tabs. (NACA RM L53I11)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF THE EFFECT OF VARYING THE RATIO OF BODY DIAMETER TO WING SPAN FROM 0.1 TO 0.8 ON THE AERODYNAMIC CHARACTERISTICS IN PITCH OF A 45° SWEPTBACK-WING—BODY COMBINATION. Harold S. Johnson. November 1953. 32p. diagrs., photo., tab. (NACA RM L53J09a)

DOWNWASH BEHIND A TRIANGULAR WING OF ASPECT RATIO 3 - TRANSONIC BUMP METHOD. John A. Axelson. December 1953. 37p. diagrs., photo., tab. (NACA RM A53I23)

THE RESULTS OF WIND-TUNNEL TESTS AT LOW SPEEDS OF A FOUR-ENGINE PROPELLER-DRIVEN AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. George G. Edwards, Donald A. Buell, and Jerald K. Dickson. December 1953. 121p. diagrs., photo., tabs. (NACA RM A53I28)

AN EXPERIMENTAL AND THEORETICAL INVESTIGATION AT HIGH SUBSONIC SPEEDS OF THE EFFECTS OF HORIZONTAL-TAIL HEIGHT ON THE AERODYNAMIC CHARACTERISTICS IN SIDESLIP OF AN UNSWEPT, UNTAPERED TAIL ASSEMBLY. Harleth G. Wiley and Donald R. Riley. December 1953. 71p. diagrs., tab. (NACA RM L53J19)

WIND-TUNNEL INVESTIGATION AT HIGH AND LOW SUBSONIC MACH NUMBERS OF TWO UNSWEPT WINGS HAVING NACA 2-006 AND NACA 65A006 AIRFOIL SECTIONS. Stanley F. Racisz. December 1953. 40p. diagrs., photo., tab. (NACA RM L53J29)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF THE EFFECTS OF CHORDWISE WING FENCES AND HORIZONTAL-TAIL POSITION ON THE STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF AN AIRPLANE MODEL WITH A 35° SWEPTBACK WING. M. J. Queijo, Byron M. Jaquet, and Walter D. Wolhart. 1954. ii, 29p. diagrs., photos., tab. (NACA Rept. 1203. Supersedes RM L50K07; RM L51H17)

THE EFFECTS OF OPERATING PROPELLERS ON THE LONGITUDINAL CHARACTERISTICS AT HIGH SUBSONIC SPEEDS OF A FOUR-ENGINE TRACTOR AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. Fred B. Sutton and Fred A. Demele. January 1954. 106p. diagrs., photo., 11 tabs. (NACA RM A53J23)

STABILITY CHARACTERISTICS AT LOW SPEED OF A VARIABLE-SWEEP AIRPLANE MODEL HAVING A PARTIALLY CAMBERED WING WITH SEVERAL CHORD-EXTENSION CONFIGURATIONS. Robert E. Becht. February 1954. 37p. diagrs., photos. (NACA RM L53L14)

THE EFFECTS OF HORIZONTAL-TAIL HEIGHT AND A PARTIAL-SPAN LEADING-EDGE EXTENSION ON THE STATIC LONGITUDINAL STABILITY OF A WING-FUSELAGE-TAIL COMBINATION HAVING A SWEPTBACK WING. Angelo Bandettini and Ralph Selan. March 1954. 54p. diagrs., photos., 2 tabs. (NACA RM A53J07)

PRELIMINARY INVESTIGATION AT SUBSONIC AND TRANSONIC SPEEDS OF THE AERODYNAMIC CHARACTERISTICS OF A BIPLANE COMPOSED OF A SWEPTBACK AND A SWEPTFORWARD WING JOINED AT THE TIPS. Jones F. Cahill and Dexter H. Stead. March 1954. 19p. diagrs., photos. (NACA RM L53L24b)

DISTRIBUTION OF LIFT AND PITCHING MOMENT BETWEEN WING AND FUSELAGE AND EFFECTS OF WING FLEXIBILITY AND DIVE BRAKE ON A 1/30-SCALE SEMISPAN MODEL OF THE BELL X-5 AIRPLANE AT TRANSONIC SPEEDS AS DETERMINED BY THE NACA WING-FLOW METHOD. Garland J. Morris and Norman S. Silsby. March 1954. 46p. diagrs., photos., tab. (NACA RM L54A11)

FLIGHT INVESTIGATION OF THE EFFECTS OF A PARTIAL-SPAN LEADING-EDGE CHORD EXTENSION OF THE AERODYNAMIC CHARACTERISTICS OF A 35° SWEPT-WING FIGHTER AIRPLANE. Frederick H. Matteson and Rudolph D. Van Dyke, Jr. April 1954. 34p. diagrs., photos., tabs. (NACA RM A54B26)

EFFECTS OF SWEEP AND THICKNESS ON THE STATIC LONGITUDINAL AERODYNAMIC CHARACTERISTICS OF A SERIES OF THIN, LOW-ASPECT-RATIO, HIGHLY TAPERED WINGS AT TRANSONIC SPEEDS. TRANSONIC-BUMP METHOD. Albert G. Few, Jr., and Paul G. Fournier. April 1954. 107p. diagrs., photo., tab. (NACA RM L54B25)

THE EFFECT OF BLUNT-TRAILING-EDGE MODIFICATIONS ON THE HIGH-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A SWEPT-WING FIGHTER AIRPLANE. Melvin Sadoff, Frederick H. Matteson, and Rudolph D. Van Dyke, Jr. May 1954. 55p. diagrs., photos., tab. (NACA RM A54C31)

EFFECT AT TRANSONIC SPEEDS OF INBOARD SPOILERS ON THE STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A 45° SWEPTBACK WING-BODY COMBINATION HAVING A LEADING-EDGE CHORD-EXTENSION. James H. Henderson. June 1954. 24p. diagrs., photo. (NACA RM L54D13)

LONGITUDINAL STABILITY AND DRAG CHARACTERISTICS OF A FIN-STABILIZED BODY OF REVOLUTION WITH A FINENESS RATIO OF 12 AS MEASURED BY THE FREE-FALL METHOD. Max C. Kurbjun. June 1954. 19p. diagrs., photos., tab. (NACA RM L54E13)

EFFECTS OF HIGH-LIFT DEVICES AND HORIZONTAL-TAIL LOCATION ON THE LOW-SPEED CHARACTERISTICS OF A LARGE-SCALE 45° SWEPT-WING AIRPLANE CONFIGURATION. Ralph L. Maki and Ursel R. Embry. August 1954. 46p. diagrs., photo., tabs. (NACA RM A54E10)

STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A COMPOSITE-PLAN-FORM WING MODEL INCLUDING SOME COMPARISONS WITH A 45° SWEPTBACK WING AT TRANSONIC SPEEDS. Walter D. Wolhart. August 1954. 36p. diagrs., photo., tabs. (NACA RM L54F24)

ANALYSIS OF WIND-TUNNEL TESTS AT LOW SPEEDS OF A FOUR-ENGINE PROPELLER-DRIVEN AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK. George G. Edwards and Donald A. Buell. October 1954. 137p. diagrs., photos., 2 tabs. (NACA RM A54F14)

EFFECTS OF WING POSITION AND FUSELAGE SIZE ON THE LOW-SPEED STATIC AND ROLLING STABILITY CHARACTERISTICS OF A DELTA-WING MODEL. Alex Goodman and David F. Thomas, Jr. 1955. ii, 31p. diagrs., photos., tabs. (NACA Rept. 1224. Supersedes TN 3063)

A METHOD FOR THE DESIGN OF SWEPTBACK WINGS WARPED TO PRODUCE SPECIFIED FLIGHT CHARACTERISTICS AT SUPERSONIC SPEEDS. Warren A. Tucker. 1955. i, 17p. diagrs., tabs. (NACA Rept. 1226. Supersedes RM L51F08)

A FLIGHT EVALUATION OF THE LONGITUDINAL STABILITY CHARACTERISTICS ASSOCIATED WITH THE PITCH-UP OF A SWEPT-WING AIRPLANE IN MANEUVERING FLIGHT AT TRANSONIC SPEEDS. Seth B. Anderson and Richard S. Bray. 1955. ii, 12p. diagrs., photo., tab. (NACA Rept. 1237. Supersedes RM A51I12)

THE DYNAMIC-RESPONSE CHARACTERISTICS OF A 35° SWEPT-WING AIRPLANE AS DETERMINED FROM FLIGHT MEASUREMENTS. William C. Triplett, Stuart C. Brown, and G. Allan Smith. 1955. ii, 25p. diagrs., tabs. (NACA Rept. 1250. Supersedes RM A51G27; RM A52I17)

FLIGHT DETERMINATION OF THE LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 58.7° SWEEPBACK. Thomas W. Finch. May 1955. 30p. diagrs., photo., tab. (NACA RM H55C07)

EFFECTS OF SWEEP ON THE MAXIMUM-LIFT CHARACTERISTICS OF FOUR ASPECT-RATIO-4 WINGS AT TRANSONIC SPEEDS. Thomas R. Turner. July 1955. 25p. diagrs. (NACA TN 3468. Formerly RM L50H11)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF EFFECT OF SIZE AND POSITION OF CLOSED AIR DUCTS ON STATIC LONGITUDINAL AND STATIC LATERAL STABILITY CHARACTERISTICS OF UNSWEPT-MIDWING MODELS HAVING WINGS OF ASPECT RATIO 2, 4, AND 6. Byron M. Jaquet and James L. Williams. September 1955. 45p. diagrs., photos., tabs. (NACA TN 3481)

THE EFFECTIVENESS OF WING VORTEX GENERATORS IN IMPROVING THE MANEUVERING CHARACTERISTICS OF A SWEPT-WING AIRPLANE AT TRANSONIC SPEEDS. Norman M. McFadden, George A. Rathert, Jr., and Richard S. Bray. September 1955. 43p. diagrs., photos., tab. (NACA TN 3523. Supersedes RM A51J18)

FLIGHT MEASUREMENTS OF THE DYNAMIC LATERAL AND LONGITUDINAL STABILITY OF THE BELL X-5 RESEARCH AIRPLANE AT 58.7° SWEEPBACK. Edward N. Videan. October 1955. 68p. diagrs., photo., tabs. (NACA RM H55H10)

AERODYNAMIC CHARACTERISTICS OF A SMALL-SCALE SHROUDED PROPELLER AT ANGLES OF ATTACK FROM 0° TO 90°. Lysle P. Parlett. November 1955. 12p. diagrs. (NACA TN 3547)

EXPERIMENTAL INVESTIGATION AT LOW SPEED OF EFFECTS OF FUSELAGE CROSS SECTION ON STATIC LONGITUDINAL AND LATERAL STABILITY CHARACTERISTICS OF MODELS HAVING 0° AND 45° SWEPTBACK SURFACES. William Letko and James L. Williams. December 1955. 45p. diagrs., tabs. (NACA TN 3551)

A SECOND-ORDER SHOCK-EXPANSION METHOD APPLICABLE TO BODIES OF REVOLUTION NEAR ZERO LIFT. Clarence A. Syvertson and David H. Dennis. January 1956. 57p. diagrs., tabs. (NACA TN 3527)

INVESTIGATION OF THE EFFECTS OF GROUND PROXIMITY AND PROPELLER POSITION ON THE EFFECTIVENESS OF A WING WITH LARGE-CHORD SLOTTED FLAPS IN REDIRECTING PROPELLER SLIPSTREAMS DOWNWARD FOR VERTICAL TAKE-OFF. Richard E. Kuhn. March 1956. 38p. diagrs., photos., tab. (NACA TN 3629)

SOME EFFECTS OF FUSELAGE FLEXIBILITY ON LONGITUDINAL STABILITY AND CONTROL. Bernard B. Klawans and Harold I. Johnson. April 1956. 42p. diagrs., tab. (NACA TN 3543)

AN ANALYSIS OF ESTIMATED AND EXPERIMENTAL TRANSONIC DOWNWASH CHARACTERISTICS AS AFFECTED BY PLAN FORM AND THICKNESS FOR WING AND WING-FUSELAGE CONFIGURATIONS. Joseph Weil, George S. Campbell and Margaret S. Diederich. April 1956. 92p. diagrs., photos., tabs. (NACA TN 3628. Supersedes RM L52I22)

A WIND-TUNNEL INVESTIGATION OF A 0.4-SCALE MODEL OF AN ASSAULT-TRANSPORT AIRPLANE WITH BOUNDARY-LAYER CONTROL APPLIED. Marvin P. Fink, Bennie W. Cocke, and Stanley Lipson. May 1956. 63p. diagrs., photos. (NACA RM L55G26a)

STATIC LONGITUDINAL AND LATERAL STABILITY CHARACTERISTICS AT LOW SPEED OF UNSWEPT-MIDWING MODELS HAVING WINGS WITH AN ASPECT RATIO OF 2, 4, OR 6. Walter D. Wolhart and David F. Thomas, Jr. May 1956. 41p. diagrs., photos., tabs. (NACA TN 3649)

INVESTIGATION AT ZERO FORWARD SPEED OF A LEADING-EDGE SLAT AS A LONGITUDINAL CONTROL DEVICE FOR VERTICALLY RISING AIRPLANES THAT UTILIZE THE REDIRECTED-SLIPSTREAM PRINCIPLE. Richard E. Kuhn. May 1956. 33p. diagrs., photos. (NACA TN 3692)

PRELIMINARY INVESTIGATION OF THE EFFECTIVENESS OF A SLIDING FLAP IN DEFLECTING A PROPELLER SLIPSTREAM DOWNWARD FOR VERTICAL TAKE-OFF. Richard E. Kuhn and Kenneth P. Spreemann. May 1956. 25p. diagrs., photo. (NACA TN 3693)

WIND-TUNNEL INVESTIGATION OF THE EFFECT OF CLIPPING THE TIPS OF TRIANGULAR WINGS OF DIFFERENT THICKNESS, CAMBER, AND ASPECT RATIO - TRANSONIC BUMP METHOD. Horace F. Emerson. June 1956. 183p. diagrs., photo., tabs. (NACA TN 3671. Supersedes RM A53L03)

INVESTIGATION OF LATERAL CONTROL NEAR THE STALL. FLIGHT TESTS WITH HIGH-WING AND LOW-WING MONOPLANES OF VARIOUS CONFIGURATIONS. Fred E. Weick and H. Norman Abramson, Agricultural and Mechanical College of Texas. June 1956. 34p. diagrs., photos., tabs. (NACA TN 3676)

INVESTIGATION OF LATERAL CONTROL NEAR THE STALL. ANALYSIS FOR REQUIRED LONGITUDINAL TRIM CHARACTERISTICS AND DISCUSSION OF DESIGN VARIABLES. Fred E. Weick and H. Norman Abramson, Agricultural and Mechanical College of Texas. June 1956. 91p. diagrs., tabs. (NACA TN 3677)

AN INVESTIGATION OF FORWARD-LOCATED FIXED SPOILERS AND DEFLECTORS AS GUST ALLEVIATORS ON AN UNSWEPT-WING MODEL. Delwin R. Croom, C. C. Shufflebarger, and Jarrett K. Huffman. June 1956. 26p. diagrs., photo. (NACA TN 3705)

(1.8.1.1.2)
Lateral

LOW-SPEED WIND-TUNNEL TESTS OF A PILOTLESS AIRCRAFT HAVING HORIZONTAL AND VERTICAL WINGS AND CRUCIFORM TAIL. N. Mastrocola and A. Assadourian. August 19, 1947. 100p. diagrs., photos., tab. (NACA RM L6J18a)

AERODYNAMIC STUDY OF A WING-FUSELAGE COMBINATION EMPLOYING A WING SWEPT BACK 63°. - AERODYNAMIC CHARACTERISTICS IN SIDESLIP OF A LARGE-SCALE MODEL HAVING A 63° SWEPT-BACK VERTICAL TAIL. Gerald M. McCormack. October 7, 1949. 26p. diagrs., photos. (NACA RM A9F14)

WING-DROPPING CHARACTERISTICS OF SOME STRAIGHT AND SWEPT WINGS AT TRANSONIC SPEEDS AS DETERMINED WITH ROCKET-POWERED MODELS. David G. Stone. May 26, 1950. 12p. diagrs., tab. (NACA RM L50C01)

NOTES ON LOW-LIFT BUFFETING AND WING DROPPING AT MACH NUMBERS NEAR 1. Paul E. Purser. March 16, 1951. 22p. diagrs., tab. (NACA RM L51A30)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 2 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LATERAL CHARACTERISTICS. David Graham and David G. Koenig. February 1952. 38p. diagrs., 2 tabs. (NACA RM A51L03)

AN APPROXIMATION TO THE EFFECT OF GEOMETRIC DIHEDRAL ON THE ROLLING MOMENT DUE TO SIDESLIP FOR WINGS AT TRANSONIC AND SUPERSONIC SPEEDS. Paul E. Purser. April 1952. 10p. diagrs. (NACA RM L52B01)

INVESTIGATION OF THE LOW-SPEED AERODYNAMIC CHARACTERISTICS OF A VARIABLE-SWEEP AIRPLANE MODEL WITH A WING HAVING PARTIAL-SPAN CAMBERED-LEADING-EDGE MODIFICATIONS. Robert E. Becht and Andrew L. Byrnes, Jr. September 1952. 47p. diagrs., photos. (NACA RM L52G08a)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE MODEL WITH AN ASPECT RATIO 4 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - HIGH-LIFT DEVICES AND LATERAL CONTROLS. Ralph W. Franks. February 1953. 45p. diagrs., photo., 2 tabs. (NACA RM A52K13)

FLIGHT MEASUREMENTS OF THE STABILITY CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE IN SIDESLIPS AT 59° SWEEPBACK. Joan M. Childs. February 1953. 23p. diagrs., photos., tab. (NACA RM L52K13b)

WIND-TUNNEL INVESTIGATION OF THE STATIC LATERAL STABILITY CHARACTERISTICS OF WING-FUSELAGE COMBINATIONS AT HIGH SUBSONIC SPEEDS. ASPECT-RATIO SERIES. Paul G. Fournier and Andrew L. Byrnes, Jr. February 1953. 26p. diagrs., photos. (NACA RM L52L18)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 3 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LONGITUDINAL AND LATERAL CHARACTERISTICS. David G. Koenig. April 1953. 61p. diagrs., photos., 4 tabs. (NACA RM A52L15)

INVESTIGATION OF THE EFFECTS OF WING AND TAIL MODIFICATIONS ON THE LOW-SPEED STABILITY CHARACTERISTICS OF A MODEL HAVING A THIN 40° SWEPT WING OF ASPECT RATIO 3.5. Joseph Weil, William C. Sleeman, Jr., and Andrew L. Byrnes, Jr. April 1953. 95p. diagrs., photos., tab. (NACA RM L53C09)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH A VARIABLE-INCIDENCE TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL. David G. Koenig. June 1953. 42p. diagrs., photo., tabs. (NACA RM A53D21)

INVESTIGATION AT LOW SPEED OF THE FLOW FIELD BEHIND THE LIFTING SURFACES OF A MODEL EQUIPPED WITH A 60° TRIANGULAR WING AND A 60° TRIANGULAR CANARD TAIL. Ernest E. Newman and Jones F. Cahill. June 1953. 44p. diagrs., photos., tab. (NACA RM L53C30)

WIND-TUNNEL INVESTIGATION TO DETERMINE THE HORIZONTAL- AND VERTICAL-TAIL CONTRIBUTIONS TO THE STATIC LATERAL STABILITY CHARACTERISTICS OF A COMPLETE-MODEL SWEPT-WING CONFIGURATION AT HIGH SUBSONIC SPEEDS. James W. Wiggins, Richard E. Kuhn, and Paul G. Fournier. July 1953. 34p. diagrs., photo. (NACA RM L53E19)

WIND-TUNNEL INVESTIGATION OF THE EFFECTS OF GEOMETRIC DIHEDRAL ON THE AERODYNAMIC CHARACTERISTICS IN PITCH AND SIDESLIP OF AN UNSWEPT- AND A 45° SWEPTBACK-WING-FUSELAGE COMBINATION AT HIGH SUBSONIC SPEEDS. Richard E. Kuhn and John W. Draper. July 1953. 41p. diagrs., photos. (NACA RM L53F09)

FREE-FLIGHT-TUNNEL INVESTIGATION OF THE LOW-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A CANARD AIRPLANE MODEL. Joseph L. Johnson, Jr., and John W. Paulson. October 1953. 37p. diagrs., photo., 2 tabs. (NACA RM L53I11)

AN EXPERIMENTAL AND THEORETICAL INVESTIGATION AT HIGH SUBSONIC SPEEDS OF THE EFFECTS OF HORIZONTAL-TAIL HEIGHT ON THE AERODYNAMIC CHARACTERISTICS IN SIDESLIP OF AN UNSWEPT, UNTAPERED TAIL ASSEMBLY. Harleth G. Wiley and Donald R. Riley. December 1953. 71p. diagrs., tab. (NACA RM L53J19)

STABILITY CHARACTERISTICS AT LOW SPEED OF A VARIABLE-SWEEP AIRPLANE MODEL HAVING A PARTIALLY CAMBERED WING WITH SEVERAL CHORD-EXTENSION CONFIGURATIONS. Robert E. Becht. February 1954. 37p. diagrs., photos. (NACA RM L53L14)

PRELIMINARY INVESTIGATION AT SUBSONIC AND TRANSONIC SPEEDS OF THE AERODYNAMIC CHARACTERISTICS OF A BIPLANE COMPOSED OF A SWEPTBACK AND A SWEPTFORWARD WING JOINED AT THE TIPS. Jones F. Cahill and Dexter H. Stead. March 1954. 19p. diagrs., pnotos. (NACA RM L53L24b)

THE EFFECT OF BLUNT-TRAILING-EDGE MODIFICATIONS ON THE HIGH-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A SWEPT-WING FIGHTER AIRPLANE. Melvin Sadoff, Frederick H. Matteson, and Rudolph D. Van Dyke, Jr. May 1954. 55p. diagrs., photos., tab. (NACA RM A54C31)

EFFECTS OF HIGH-LIFT DEVICES AND HORIZONTAL-TAIL LOCATION ON THE LOW-SPEED CHARACTERISTICS OF A LARGE-SCALE 45° SWEPT-WING AIRPLANE CONFIGURATION. Ralph L. Maki and Ursel R. Embry. August 1954. 46p. diagrs., photo., tabs. (NACA RM A54E10)

EFFECTS OF WING POSITION AND FUSELAGE SIZE ON THE LOW-SPEED STATIC AND ROLLING STABILITY CHARACTERISTICS OF A DELTA-WING MODEL. Alex Goodman and David F. Thomas, Jr. 1955. ii, 31p. diagrs., photos., tabs. (NACA Rept. 1224. Supersedes TN 3063)

THE DYNAMIC-RESPONSE CHARACTERISTICS OF A 35° SWEPT-WING AIRPLANE AS DETERMINED FROM FLIGHT MEASUREMENTS. William C. Triplett, Stuart C. Brown, and G. Allan Smith. 1955. ii, 25p. diagrs., tabs. (NACA Rept. 1250. Supersedes RM A51G27; RM A52I17)

WIND-TUNNEL INVESTIGATION AT LOW SPEED OF EFFECT OF SIZE AND POSITION OF CLOSED AIR DUCTS ON STATIC LONGITUDINAL AND STATIC LATERAL STABILITY CHARACTERISTICS OF UNSWEPT-MIDWING MODELS HAVING WINGS OF ASPECT RATIO 2, 4, AND 6. Byron M. Jaquet and James L. Williams. September 1955. 45p. diagrs., photos., tabs. (NACA TN 3481)

THE EFFECTIVENESS OF WING VORTEX GENERATORS IN IMPROVING THE MANEUVERING CHARACTERISTICS OF A SWEPT-WING AIRPLANE AT TRANSONIC SPEEDS. Norman M. McFadden, George A. Rathert, Jr., and Richard S. Bray. September 1955. 43p. diagrs., photos., tab. (NACA TN 3523. Supersedes RM A51J18)

LOW-SPEED STATIC LATERAL AND ROLLING STABILITY CHARACTERISTICS OF A SERIES OF CONFIGURATIONS COMPOSED OF INTERSECTING TRIANGULAR PLAN-FORM SURFACES. David F. Thomas, Jr. October 1955. 29p. diagrs., photos. (NACA TN 3532)

EXPERIMENTAL INVESTIGATION AT LOW SPEED OF EFFECTS OF FUSELAGE CROSS SECTION ON STATIC LONGITUDINAL AND LATERAL STABILITY CHARACTERISTICS OF MODELS HAVING 0° AND 45° SWEPTBACK SURFACES. William Letko and James L. Williams. December 1955. 45p. diagrs., tabs. (NACA TN 3551)

THEORETICAL SPAN LOAD DISTRIBUTIONS AND ROLLING MOMENTS FOR SIDESLIPPING WINGS OF ARBITRARY PLAN FORM IN INCOMPRESSIBLE FLOW. M. J. Queijo. December 1955. 45p. diagrs. (NACA TN 3605)

WIND-TUNNEL INVESTIGATION OF EFFECTS OF FUSELAGE CROSS-SECTIONAL SHAPE, FUSELAGE BEND, AND VERTICAL-TAIL SIZE ON DIRECTIONAL CHARACTERISTICS OF NONOVERLAP-TYPE HELICOPTER FUSELAGE MODELS WITHOUT ROTORS. James L. Williams. March 1956. 39p. diagrs., photos. (NACA TN 3645)

A WIND-TUNNEL INVESTIGATION OF A 0.4-SCALE MODEL OF AN ASSAULT-TRANSPORT AIRPLANE WITH BOUNDARY-LAYER CONTROL APPLIED. Marvin P. Fink, Bennie W. Cocke, and Stanley Lipson. May 1956. 63p. diagrs., photos. (NACA RM L55G26a)

STATIC LONGITUDINAL AND LATERAL STABILITY CHARACTERISTICS AT LOW SPEED OF UNSWEPT-MIDWING MODELS HAVING WINGS WITH AN ASPECT RATIO OF 2, 4, OR 6. Walter D. Wolhart and David F. Thomas, Jr. May 1956. 41p. diagrs., photos., tabs. (NACA TN 3649)

(1.8.1.1.3) Directional

AERODYNAMIC STUDY OF A WING-FUSELAGE COMBINATION EMPLOYING A WING SWEPT BACK 63°. - AERODYNAMIC CHARACTERISTICS IN SIDESLIP OF A LARGE-SCALE MODEL HAVING A 63° SWEPT-BACK VERTICAL TAIL. Gerald M. McCormack. October 7, 1949. 26p. diagrs., photos. (NACA RM A9F14)

FLIGHT DETERMINATION OF THE EFFECTS OF RUDDER-PEDAL-FORCE CHARACTERISTICS ON THE AIMING ERROR IN AZIMUTH OF A CONVENTIONAL FIGHTER AIRPLANE. Lee Winograd and Rudolph D. Van Dyke, Jr. July 5, 1950. 32p. diagrs., photos., tab. (NACA RM A50D06)

EFFECT OF THE PROXIMITY OF THE GROUND ON THE STABILITY AND CONTROL CHARACTERISTICS OF A VERTICALLY RISING AIRPLANE MODEL IN THE HOVERING CONDITION. Charles C. Smith, Jr., Powell M. Lovell, Jr., and William R. Bates. September 1951. 16p. diagrs., tab. (NACA RM L51G05)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 2 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LATERAL CHARACTERISTICS. David Graham and David G. Koenig. February 1952. 38p. diagrs., 2 tabs. (NACA RM A51L03)

EFFECT OF CAMBER AND TWIST ON THE STABILITY CHARACTERISTICS OF MODELS HAVING A 45° SWEPT WING AS DETERMINED BY THE FREE-FALL METHOD AT TRANSONIC SPEEDS. Maurice D. White. August 1952. 35p. diagrs., photos., tab. (NACA RM A52F16)

INVESTIGATION OF THE LOW-SPEED AERODYNAMIC CHARACTERISTICS OF A VARIABLE-SWEEP AIRPLANE MODEL WITH A WING HAVING PARTIAL-SPAN CAMBERED-LEADING-EDGE MODIFICATIONS. Robert E. Becht and Andrew L. Byrnes, Jr. September 1952. 47p. diagrs., photos. (NACA RM L52G08a)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE MODEL WITH AN ASPECT RATIO 4 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - HIGH-LIFT DEVICES AND LATERAL CONTROLS. Ralph W. Franks. February 1953. 45p. diagrs., photo., 2 tabs. (NACA RM A52K13)

FLIGHT MEASUREMENTS OF THE STABILITY CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE IN SIDESLIPS AT 59° SWEEPBACK. Joan M. Childs. February 1953. 23p. diagrs., photos., tab. (NACA RM L52K13b)

WIND-TUNNEL INVESTIGATION OF THE STATIC LATERAL STABILITY CHARACTERISTICS OF WING-FUSELAGE COMBINATIONS AT HIGH SUBSONIC SPEEDS. ASPECT-RATIO SERIES. Paul G. Fournier and Andrew L. Byrnes, Jr. February 1953. 26p. diagrs., photos. (NACA RM L52L18)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 3 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LONGITUDINAL AND LATERAL CHARACTERISTICS. David G. Koenig. April 1953. 61p. diagrs., photos., 4 tabs. (NACA RM A52L15)

INVESTIGATION OF THE EFFECTS OF WING AND TAIL MODIFICATIONS ON THE LOW-SPEED STABILITY CHARACTERISTICS OF A MODEL HAVING A THIN 40° SWEPT WING OF ASPECT RATIO 3.5. Joseph Weil, William C. Sleeman, Jr., and Andrew L. Byrnes, Jr. April 1953. 95p. diagrs., photos., tab. (NACA RM L53C09)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH A VARIABLE-INCIDENCE TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL. David G. Koenig. June 1953. 42p. diagrs., photo., tabs. (NACA RM A53D21)

WIND-TUNNEL INVESTIGATION TO DETERMINE THE HORIZONTAL- AND VERTICAL-TAIL CONTRIBUTIONS TO THE STATIC LATERAL STABILITY CHARACTERISTICS OF A COMPLETE-MODEL SWEPT-WING CONFIGURATION AT HIGH SUBSONIC SPEEDS. James W. Wiggins, Richard E. Kuhn, and Paul G. Fournier. July 1953. 34p. diagrs., photo. (NACA RM L53E19)

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FREE-FLIGHT-TUNNEL INVESTIGATION OF THE LOW-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A CANARD AIRPLANE MODEL. Joseph L. Johnson, Jr., and John W. Paulson. October 1953. 37p. diagrs., photo., 2 tabs. (NACA RM L53I11)

AN EXPERIMENTAL AND THEORETICAL INVESTIGATION AT HIGH SUBSONIC SPEEDS OF THE EFFECTS OF HORIZONTAL-TAIL HEIGHT ON THE AERODYNAMIC CHARACTERISTICS IN SIDESLIP OF AN UNSWEPT, UNTAPERED TAIL ASSEMBLY. Harleth G. Wiley and Donald R. Riley. December 1953. 71p. diagrs., tab. (NACA RM L53J19)

A STUDY OF THE CHARACTERISTICS OF HUMAN-PILOT CONTROL RESPONSE TO SIMULATED AIRCRAFT LATERAL MOTIONS. Donald C. Cheatham. 1954. ii, 14p. diagrs., photos., tab. (NACA Rept. 1197. Formerly RM L52C17)

STABILITY CHARACTERISTICS AT LOW SPEED OF A VARIABLE-SWEEP AIRPLANE MODEL HAVING A PARTIALLY CAMBERED WING WITH SEVERAL CHORD-EXTENSION CONFIGURATIONS. Robert E. Becht. February 1954. 37p. diagrs., photos. (NACA RM L53L14)

CHARTS FOR ESTIMATING TAIL-ROTOR CONTRIBUTION TO HELICOPTER DIRECTIONAL STABILITY AND CONTROL IN LOW-SPEED FLIGHT. Kenneth B. Amer and Alfred Gessow. 1955. ii, 22p. diagrs., photo., tabs. (NACA Rept. 1216. Supersedes TN 3156)

EFFECTS OF WING POSITION AND FUSELAGE SIZE ON THE LOW-SPEED STATIC AND ROLLING STABILITY CHARACTERISTICS OF A DELTA-WING MODEL. Alex Goodman and David F. Thomas, Jr. 1955. ii, 31p. diagrs., photos., tabs. (NACA Rept. 1224. Supersedes TN 3063)

THE DYNAMIC-RESPONSE CHARACTERISTICS OF A 35° SWEPT-WING AIRPLANE AS DETERMINED FROM FLIGHT MEASUREMENTS. William C. Triplett, Stuart C. Brown, and G. Allan Smith. 1955. ii, 25p. diagrs., tabs. (NACA Rept. 1250. Supersedes RM A51G27; RM A52I17)

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LOW-SPEED STATIC LATERAL AND ROLLING STABILITY CHARACTERISTICS OF A SERIES OF CONFIGURATIONS COMPOSED OF INTERSECTING TRIANGULAR PLAN-FORM SURFACES. David F. Thomas, Jr. October 1955. 29p. diagrs., photos. (NACA TN 3532)

EXPERIMENTAL INVESTIGATION AT LOW SPEED OF EFFECTS OF FUSELAGE CROSS SECTION ON STATIC LONGITUDINAL AND LATERAL STABILITY CHARACTERISTICS OF MODELS HAVING 0° AND 45° SWEPTBACK SURFACES. William Letko and James L. Williams. December 1955. 45p. diagrs., tabs. (NACA TN 3551)

WIND-TUNNEL INVESTIGATION OF EFFECTS OF FUSELAGE CROSS-SECTIONAL SHAPE, FUSELAGE BEND, AND VERTICAL-TAIL SIZE ON DIRECTIONAL CHARACTERISTICS OF NONOVERLAP-TYPE HELICOPTER FUSELAGE MODELS WITHOUT ROTORS. James L. Williams. March 1956. 39p. diagrs., photos. (NACA TN 3645)

STATIC LONGITUDINAL AND LATERAL STABILITY CHARACTERISTICS AT LOW SPEED OF UNSWEPT-MIDWING MODELS HAVING WINGS WITH AN ASPECT RATIO OF 2, 4, OR 6. Walter D. Wolhart and David F. Thomas, Jr. May 1956. 41p. diagrs., photos., tabs. (NACA TN 3649)

(1.8.1.2) DYNAMIC

EXPERIMENTAL DAMPING IN PITCH OF 45° TRIANGULAR WINGS. Murray Tobak, David E. Reese, Jr., and Benjamin H. Beam. December 1, 1950. 63p. diagrs., photo. (NACA RM A50J26)

FLIGHT INVESTIGATION OF A ROLL-STABILIZED MISSILE CONFIGURATION AT VARYING ANGLES OF ATTACK AT MACH NUMBERS BETWEEN 0.8 AND 1.79. Jacob Zarovsky and Robert A. Gardiner. March 6, 1951. 38p. diagrs., photos., tab. (NACA RM L50H21)

ADDITIONAL STUDIES OF THE STABILITY AND CONTROLLABILITY OF AN UNSWEPT-WING VERTICALLY RISING AIRPLANE MODEL IN HOVERING FLIGHT INCLUDING STUDIES OF VARIOUS TETHERED LANDING TECHNIQUES. William R. Bates, Powell M. Lovell, Jr., and Charles C. Smith, Jr. November 1951. 25p. diagrs., photos., tab. (NACA RM L51I07a)

ON THE USE OF THE INDICIAL FUNCTION CONCEPT IN THE ANALYSIS OF UNSTEADY MOTIONS OF WINGS AND WING-TAIL COMBINATIONS. Murray Tobak. 1954. iii, 43p. diagrs. (NACA Rept. 1188)

LABORATORY INVESTIGATION OF AN AUTOPILOT UTILIZING A MECHANICAL LINKAGE WITH A DEAD SPOT TO OBTAIN AN EFFECTIVE RATE SIGNAL. Ernest C. Seaberg. December 1955. 27p. diagrs., photos., tab. (NACA TN 3602. Supersedes RM L9F15a)

HOVERING-FLIGHT TESTS OF A MODEL OF A TRANSPORT VERTICAL-TAKE-OFF AIRPLANE WITH TILTING WING AND PROPELLERS. Powell M. Lovell, Jr., and Lysle P. Parlett. March 1956. 23p diagrs., photo., tab. (NACA TN 3630)

(1.8.1.2.1) Longitudinal

AERODYNAMIC CHARACTERISTICS AND FLYING QUALITIES OF A TAILLESS TRIANGULAR-WING AIRPLANE CONFIGURATION AS OBTAINED FROM FLIGHTS OF ROCKET-PROPELLED MODELS AT TRANSONIC AND LOW SUPERSONIC SPEEDS. Grady L. Mitcham, Joseph E. Stevens, and Harry P. Norris. February 9, 1950. 67p. diagrs., photos., tabs. (NACA RM L9L07)

THE LONGITUDINAL STABILITY, CONTROL EFFECTIVENESS AND CONTROL HINGE-MOMENT CHARACTERISTICS OBTAINED FROM A FLIGHT INVESTIGATION OF A CANARD MISSILE CONFIGURATION AT TRANSONIC AND SUPERSONIC SPEEDS. Roy J. Niewald and Martin T. Moul. November 24, 1950. 43p. diagrs., photos. (NACA RM L50I27)

EXPERIMENTAL DAMPING IN PITCH OF 45° TRIANGULAR WINGS. Murray Tobak, David E. Reese, Jr., and Benjamin H. Beam. December 1, 1950. 63p. diagrs., photo. (NACA RM A50J26)

DYNAMIC STABILITY AND CONTROL CHARACTERISTICS OF A VERTICALLY RISING AIRPLANE MODEL IN HOVERING FLIGHT. William R. Bates, Powell M. Lovell, Jr., and Charles C. Smith, Jr. February 23, 1951. 16p. diagrs., photos., tab. (NACA RM L50J16)

DYNAMIC STABILITY AND CONTROL CHARACTERISTICS OF A DELTA-WING VERTICALLY RISING AIRPLANE MODEL IN TAKE-OFFS, LANDINGS, AND HOVERING FLIGHT. Powell M. Lovell, Jr., William R. Bates and Charles C. Smith, Jr. October 1951. 14p. diagrs., photo., tab. (NACA RM L51H13a)

LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS FROM A FLIGHT INVESTIGATION OF A CRUCIFORM CANARD MISSILE CONFIGURATION HAVING AN EXPOSED WING-CANARD AREA RATIO OF 16:1. Martin T. Moul and Andrew R. Wineman. June 1952. 32p. diagrs., photos. (NACA RM L52D24a)

EFFECT OF CAMBER AND TWIST ON THE STABILITY CHARACTERISTICS OF MODELS HAVING A 45° SWEPT WING AS DETERMINED BY THE FREE-FALL METHOD AT TRANSONIC SPEEDS. Maurice D. White. August 1952. 35p. diagrs., photos., tab. (NACA RM A52F16)

LONGITUDINAL STABILITY, TRIM, AND DRAG CHARACTERISTICS OF A ROCKET-PROPELLED MODEL OF AN AIRPLANE CONFIGURATION HAVING A 45° SWEPTBACK WING AND AN UNSWEPT HORIZONTAL TAIL. James H. Parks and Alan B. Kehlet. August 1952. 29p. diagrs., photos., tab. (NACA RM L52F05)

LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF A CANARD MISSILE CONFIGURATION FOR MACH NUMBERS FROM 1.1 TO 1.93 AS DETERMINED FROM FREE-FLIGHT AND WIND-TUNNEL INVESTIGATIONS. Howard J. Curfman, Jr., and Carl E. Grigsby. August 1952. 28p. diagrs., tab. (NACA RM L52F06)

FREE-FLIGHT-TUNNEL INVESTIGATION OF THE LOW-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A CANARD AIRPLANE MODEL. Joseph L. Johnson, Jr., and John W. Paulson. October 1953. 37p. diagrs., photo., 2 tabs. (NACA RM L53I11)

ON THE USE OF THE INDICIAL FUNCTION CONCEPT IN THE ANALYSIS OF UNSTEADY MOTIONS OF WINGS AND WING-TAIL COMBINATIONS. Murray Tobak. 1954. iii, 43p. diagrs. (NACA Rept. 1188)

APPLICATION OF SEVERAL METHODS FOR DETERMINING TRANSFER FUNCTIONS AND FREQUENCY RESPONSE OF AIRCRAFT FROM FLIGHT DATA. John M. Eggleston and Charles W. Mathews. 1954. ii, 24p. diagrs., tabs. (NACA Rept. 1204. Supersedes TN 2997)

FLIGHT TESTS OF A 0.4-SCALE MODEL OF A STAND-ON TYPE OF VERTICALLY RISING AIRCRAFT. Marion O. McKinney and Lysle P. Parlett. March 1954. 23p. diagrs., photos. (NACA RM L54B16b)

DYNAMIC STABILITY AND CONTROL CHARACTERISTICS OF A DUCTED-FAN MODEL IN HOVERING FLIGHT. Robert H. Kirby. April 1954. 16p. diagrs., photos. (NACA RM L54C18)

THEORETICAL AND ANALOG STUDIES OF THE EFFECTS OF NONLINEAR STABILITY DERIVATIVES ON THE LONGITUDINAL MOTIONS OF AN AIRCRAFT IN RESPONSE TO STEP CONTROL DEFLECTIONS AND TO THE INFLUENCE OF PROPORTIONAL AUTOMATIC CONTROL. Howard J. Curfman, Jr. 1955. ii, 21p. diagrs. (NACA Rept. 1241. Supersedes RM L50L11)

THE DYNAMIC-RESPONSE CHARACTERISTICS OF A 35° SWEPT-WING AIRPLANE AS DETERMINED FROM FLIGHT MEASUREMENTS. William C. Triplett, Stuart C. Brown, and G. Allan Smith. 1955. ii, 25p. diagrs., tabs. (NACA Rept. 1250. Supersedes RM A51G27; RM A52I17)

FLIGHT DETERMINATION OF THE LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 58.7° SWEEPBACK. Thomas W. Finch. May 1955. 30p. diagrs., photo., tab. (NACA RM H55C07)

FLIGHT MEASUREMENTS OF THE DYNAMIC LATERAL AND LONGITUDINAL STABILITY OF THE BELL X-5 RESEARCH AIRPLANE AT 58.7° SWEEPBACK. Edward N. Videan. October 1955. 68p. diagrs., photo., tabs. (NACA RM H55H10)

SOME EFFECTS OF FUSELAGE FLEXIBILITY ON LONGITUDINAL STABILITY AND CONTROL. Bernard B. Klawans and Harold I. Johnson. April 1956. 42p. diagrs., tab. (NACA TN 3543)

ANALYSIS OF A VANE-CONTROLLED GUST-ALLEVIATION SYSTEM. Robert W. Boucher and Christopher C. Kraft, Jr. April 1956. 45p. diagrs., tabs. (NACA TN 3597)

(1.8.1.2.2)
Lateral and Directional

PRELIMINARY THEORETICAL AND FLIGHT INVESTIGATION OF THE LATERAL OSCILLATION OF THE X-1 AIRPLANE. Hubert M. Drake and Helen L. Wall. July 19, 1949. 24p. diagrs., photo., tab. (NACA RM L9F07)

FLIGHT DETERMINATION OF THE EFFECTS OF RUDDER-PEDAL-FORCE CHARACTERISTICS ON THE AIMING ERROR IN AZIMUTH OF A CONVENTIONAL FIGHTER AIRPLANE. Lee Winograd and Rudolph D. Van Dyke, Jr. July 5, 1950. 32p. diagrs., photos., tab. (NACA RM A50D06)

DYNAMIC STABILITY AND CONTROL CHARACTERISTICS OF A VERTICALLY RISING AIRPLANE MODEL IN HOVERING FLIGHT. William R. Bates, Powell M. Lovell, Jr., and Charles C. Smith, Jr. February 23, 1951. 16p. diagrs., photos., tab. (NACA RM L50J16)

EFFECT OF THE PROXIMITY OF THE GROUND ON THE STABILITY AND CONTROL CHARACTERISTICS OF A VERTICALLY RISING AIRPLANE MODEL IN THE HOVERING CONDITION. Charles C. Smith, Jr., Powell M. Lovell, Jr., and William R. Bates. September 1951. 16p. diagrs., tab. (NACA RM L51G05)

DYNAMIC STABILITY AND CONTROL CHARACTERISTICS OF A DELTA-WING VERTICALLY RISING AIRPLANE MODEL IN TAKE-OFFS, LANDINGS, AND HOVERING FLIGHT. Powell M. Lovell, Jr., William R. Bates and Charles C. Smith, Jr. October 1951. 14p. diagrs., photo., tab. (NACA RM L51H13a)

AN APPROXIMATION TO THE EFFECT OF GEOMETRIC DIHEDRAL ON THE ROLLING MOMENT DUE TO SIDESLIP FOR WINGS AT TRANSONIC AND SUPERSONIC SPEEDS. Paul E. Purser. April 1952. 10p. diagrs. (NACA RM L52B01)

PRELIMINARY THEORETICAL INVESTIGATION OF SEVERAL METHODS FOR STABILIZING THE LATERAL MOTION OF A HIGH-SPEED FIGHTER AIRPLANE TOWED BY A SINGLE CABLE. Albert A. Schy and Carroll H. Woodling. March 1953. 46p. diagrs., 2 tabs. (NACA RM L52L24)

FREE-FLIGHT-TUNNEL INVESTIGATION OF THE LOW-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A CANARD AIRPLANE MODEL. Joseph L. Johnson, Jr., and John W. Paulson. October 1953. 37p. diagrs., photo., 2 tabs. (NACA RM L53I11)

A STUDY OF THE CHARACTERISTICS OF HUMAN-PILOT CONTROL RESPONSE TO SIMULATED AIRCRAFT LATERAL MOTIONS. Donald C. Cheatham. 1954. ii, 14p. diagrs., photos., tab. (NACA Rept. 1197. Formerly RM L52C17)

A STUDY OF THE PROBLEM OF DESIGNING AIRPLANES WITH SATISFACTORY INHERENT DAMPING OF THE DUTCH ROLL OSCILLATION. John P. Campbell and Marion O. McKinney, Jr. 1954. ii, 18p. diagrs., tabs. (NACA Rept. 1199. Supersedes TN 3035)

FLIGHT TESTS OF A 0.4-SCALE MODEL OF A STAND-ON TYPE OF VERTICALLY RISING AIRCRAFT. Marion O. McKinney and Lysle P. Parlett. March 1954. 23p. diagrs., photos. (NACA RM L54B16b)

THEORETICAL INVESTIGATION OF SOME DISCONTINUOUS YAW DAMPERS. William H. Phillips and Helmut A. Kuehnel. April 1954. 39p. diagrs. (NACA RM L54B24a)

DYNAMIC STABILITY AND CONTROL CHARACTERISTICS OF A DUCTED-FAN MODEL IN HOVERING FLIGHT. Robert H. Kirby. April 1954. 16p. diagrs., photos. (NACA RM L54C18)

CHARTS FOR ESTIMATING TAIL-ROTOR CONTRIBUTION TO HELICOPTER DIRECTIONAL STABILITY AND CONTROL IN LOW-SPEED FLIGHT. Kenneth B. Amer and Alfred Gessow. 1955. ii, 22p. diagrs., photo., tabs. (NACA Rept. 1216. Supersedes TN 3156)

EFFECTS OF WING POSITION AND FUSELAGE SIZE ON THE LOW-SPEED STATIC AND ROLLING STABILITY CHARACTERISTICS OF A DELTA-WING MODEL. Alex Goodman and David F. Thomas, Jr. 1955. ii, 31p. diagrs., photos., tabs. (NACA Rept. 1224. Supersedes TN 3063)

DETERMINATION OF LATERAL-STABILITY DERIVATIVES AND TRANSFER-FUNCTION COEFFICIENTS FROM FREQUENCY-RESPONSE DATA FOR LATERAL MOTIONS. James J. Donegan, Samuel W. Robinson, Jr., and Ordway B. Gates, Jr. 1955. i, 19p. diagrs., tabs. (NACA Rept. 1225. Supersedes TN 3083)

THE DYNAMIC-RESPONSE CHARACTERISTICS OF A 35° SWEPT-WING AIRPLANE AS DETERMINED FROM FLIGHT MEASUREMENTS. William C. Triplett, Stuart C. Brown, and G. Allan Smith. 1955. ii, 25p. diagrs., tabs. (NACA Rept. 1250. Supersedes RM A51G27; RM A52I17)

A COMPARISON OF THE MEASURED AND PREDICTED LATERAL OSCILLATORY CHARACTERISTICS OF A 35° SWEPT-WING FIGHTER AIRPLANE. Walter E. McNeill and George E. Cooper. August 1955. 22p. diagrs., photo., 3 tabs. (NACA TN 3521. Formerly RM A51C28)

FLIGHT MEASUREMENTS OF THE DYNAMIC LATERAL AND LONGITUDINAL STABILITY OF THE BELL X-5 RESEARCH AIRPLANE AT 58.7° SWEEPBACK. Edward N. Videan. October 1955. 68p. diagrs., photo., tabs. (NACA RM H55H10)

LOW-SPEED STATIC LATERAL AND ROLLING STABILITY CHARACTERISTICS OF A SERIES OF CONFIGURATIONS COMPOSED OF INTERSECTING TRIANGULAR PLAN-FORM SURFACES. David F. Thomas, Jr. October 1955. 29p. diagrs., photos. (NACA TN 3532)

DIRECTIONAL STABILITY OF TOWED AIRPLANES. (Die Seitenstabilitat eines geschleppten Flugzeuges). W. Sohne. January 1956. 53p. diagrs., tab. (NACA TM 1401. Trans. from Ingenieur-Archiv, v. 21, no. 4, 1953, p. 245-265)

A PRELIMINARY INVESTIGATION OF THE EFFECTS OF FREQUENCY AND AMPLITUDE ON THE ROLLING DERIVATIVES OF AN UNSWEPT-WING MODEL OSCILLATING IN ROLL. Lewis R. Fisher, Jacob H. Lichtenstein, and Katherine D. Williams. January 1956. 29p. diagrs., photos. (NACA TN 3554)

THEORETICAL STUDY OF THE LATERAL FREQUENCY RESPONSE TO GUSTS OF A FIGHTER AIRPLANE, BOTH WITH CONTROLS FIXED AND WITH SEVERAL TYPES OF AUTOPILOTS. James J. Adams and Charles W. Mathews. March 1956. 46p. diagrs., tabs. (NACA TN 3603)

LINEARIZED LIFTING-SURFACE AND LIFTING-LINE EVALUATIONS OF SIDEWASH BEHIND ROLLING TRIANGULAR WINGS AT SUPERSONIC SPEEDS. Percy J. Bobbitt. March 1956. 63p. diagrs. (NACA TN 3609)

ANALYTICAL STUDY OF MODIFICATIONS TO THE AUTOPILOT OF A FIGHTER AIRPLANE IN ORDER TO REDUCE THE RESPONSE TO SIDE GUSTS. Charles W. Mathews and James J. Adams. March 1956. 35p. diagrs., tabs. (NACA TN 3635)

FLIGHT INVESTIGATION OF THE EFFECTIVENESS OF AN AUTOMATIC AILERON TRIM CONTROL DEVICE FOR PERSONAL AIRPLANES. William H. Phillips, Helmut A. Kuehnel and James B. Whitten. April 1956. 42p. diagrs., photos., tab. (NACA TN 3637)

(1.8.1.2.3)
Damping Derivatives

FREE-FLIGHT INVESTIGATION OF THE ROLLING EFFECTIVENESS OF SEVERAL DELTA WING - AILERON CONFIGURATIONS AT TRANSONIC AND SUPERSONIC SPEEDS. Carl A. Sandahl. August 27, 1948. 19p. diagrs., photos., tab. (NACA RM L8D16)

PRELIMINARY THEORETICAL AND FLIGHT INVESTIGATION OF THE LATERAL OSCILLATION OF THE X-1 AIRPLANE. Hubert M. Drake and Helen L. Wall. July 19, 1949. 24p. diagrs., photo., tab. (NACA RM L9F07)

ROCKET-POWERED FLIGHT TEST OF A ROLL-STABILIZED SUPERSONIC MISSILE CONFIGURATION. Robert A. Gardiner and Jacob Zarovsky. January 12, 1950. 32p. diagrs., photos., tab. (NACA RM L9K01a)

AERODYNAMIC CHARACTERISTICS AND FLYING QUALITIES OF A TAILLESS TRIANGULAR-WING AIRPLANE CONFIGURATION AS OBTAINED FROM FLIGHTS OF ROCKET-PROPELLED MODELS AT TRANSONIC AND LOW SUPERSONIC SPEEDS. Grady L. Mitcham, Joseph E. Stevens, and Harry P. Norris. February 9, 1950. 67p. diagrs., photos., tabs. (NACA RM L9L07)

EXPERIMENTAL DAMPING IN PITCH OF 45° TRIANGULAR WINGS. Murray Tobak, David E. Reese, Jr., and Benjamin H. Beam. December 1, 1950. 63p. diagrs., photo. (NACA RM A50J26)

WIND-TUNNEL INVESTIGATION AT SUBSONIC AND LOW TRANSONIC SPEEDS OF THE EFFECTS OF AILERON SPAN AND SPANWISE LOCATION ON THE ROLLING CHARACTERISTICS OF A TEST VEHICLE WITH THREE UNTAPERED 45° SWEPTBACK WINGS. Harold S. Johnson. April 6, 1951. 26p. diagrs., photo., tab. (NACA RM L51B16)

SOME EFFECTS OF FUSELAGE INTERFERENCE, WING INTERFERENCE AND SWEEPBACK ON THE DAMPING IN ROLL OF UNTAPERED WINGS AS DETERMINED BY TECHNIQUES EMPLOYING ROCKET-PROPELLED VEHICLES. William M. Bland, Jr., and Albert E. Dietz. October 1951. 27p. diagrs., photos. (NACA RM L51D25)

DAMPING IN ROLL OF STRAIGHT AND 45° SWEPT WINGS OF VARIOUS TAPER RATIOS DETERMINED AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS WITH ROCKET-POWERED MODELS. E. Claude Sanders, Jr. October 1951. 15p. diagrs. (NACA RM L51H14)

DAMPING IN ROLL OF MODELS WITH 45°, 60°, AND 70° DELTA WINGS DETERMINED AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS WITH ROCKET-POWERED MODELS. E. Claude Sanders, Jr. June 1952. 18p. diagrs., photos. (NACA RM L52D22a)

EFFECT OF FUSELAGE INTERFERENCE ON THE DAMPING IN ROLL OF DELTA WINGS OF ASPECT RATIO 4 IN THE MACH NUMBER RANGE BETWEEN 0.6 AND 1.6 AS DETERMINED WITH ROCKET-PROPELLED VEHICLES. William M. Bland, Jr. July 1952. 13p. diagrs., photos. (NACA RM L52E13)

EFFECT OF CAMBER AND TWIST ON THE STABILITY CHARACTERISTICS OF MODELS HAVING A 45° SWEPT WING AS DETERMINED BY THE FREE-FALL METHOD AT TRANSONIC SPEEDS. Maurice D. White. August 1952. 35p. diagrs., photos., tab. (NACA RM A52F16)

LONGITUDINAL STABILITY, TRIM, AND DRAG CHARACTERISTICS OF A ROCKET-PROPELLED MODEL OF AN AIRPLANE CONFIGURATION HAVING A 45° SWEPTBACK WING AND AN UNSWEPT HORIZONTAL TAIL. James H. Parks and Alan B. Kehlet. August 1952. 29p. diagrs., photos., tab. (NACA RM L52F05)

INVESTIGATIONS OF THE DAMPING IN ROLL OF SWEPT AND TAPERED WINGS AT SUPERSONIC SPEEDS. Russell W. McDearmon and Harry S. Heinke, Jr. March 1953. 35p. diagrs., photos., tab. (NACA RM L53A13)

A COLLECTION OF DATA FOR ZERO-LIFT DAMPING IN ROLL OF WING-BODY COMBINATIONS AS DETERMINED WITH ROCKET-POWERED MODELS EQUIPPED WITH ROLL-TORQUE NOZZLES. David G. Stone. July 1953. 23p. diagrs., tab. (NACA RM L53E26)

FREE-FLIGHT-TUNNEL INVESTIGATION OF THE LOW-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A CANARD AIRPLANE MODEL. Joseph L. Johnson, Jr., and John W. Paulson. October 1953. 37p. diagrs., photo., 2 tabs. (NACA RM L53I11)

WIND-TUNNEL INVESTIGATION OF THE EFFECTS OF STEADY ROLLING ON THE AERODYNAMIC LOADING CHARACTERISTICS OF A 45° SWEPT-BACK WING AT HIGH SUBSONIC SPEEDS. James W. Wiggins and Richard E. Kuhn. November 1953. 22p. diagrs., photos. (NACA RM L53J01a)

SUPERSONIC FLOW PAST OSCILLATING AIRFOILS INCLUDING NONLINEAR THICKNESS EFFECTS. Milton D. Van Dyke. 1954. ii, 17p. diagrs. (NACA Rept. 1183. Formerly TN 2982)

ON THE USE OF THE INDICIAL FUNCTION CONCEPT IN THE ANALYSIS OF UNSTEADY MOTIONS OF WINGS AND WING-TAIL COMBINATIONS. Murray Tobak. 1954. iii, 43p. diagrs. (NACA Rept. 1188)

EFFECTS OF WING POSITION AND FUSELAGE SIZE ON THE LOW-SPEED STATIC AND ROLLING STABILITY CHARACTERISTICS OF A DELTA-WING MODEL. Alex Goodman and David F. Thomas, Jr. 1955. ii, 31p. diagrs., photos., tabs. (NACA Rept. 1224. Supersedes TN 3063)

THEORETICAL AND ANALOG STUDIES OF THE EFFECTS OF NONLINEAR STABILITY DERIVATIVES ON THE LONGITUDINAL MOTIONS OF AN AIRCRAFT IN RESPONSE TO STEP CONTROL DEFLECTIONS AND TO THE INFLUENCE OF PROPORTIONAL AUTOMATIC CONTROL. Howard J. Curfman, Jr. 1955. ii, 21p. diagrs. (NACA Rept. 1241. Supersedes RM L50L11)

THE DYNAMIC-RESPONSE CHARACTERISTICS OF A 35° SWEPT-WING AIRPLANE AS DETERMINED FROM FLIGHT MEASUREMENTS. William C. Triplett, Stuart C. Brown, and G. Allan Smith. 1955. ii, 25p. diagrs., tabs. (NACA Rept. 1250. Supersedes RM A51G27; RM A52I17)

AERODYNAMICS OF A RECTANGULAR WING OF INFINITE ASPECT RATIO AT HIGH ANGLES OF ATTACK AND SUPERSONIC SPEEDS. John C. Martin and Frank S. Malvestuto, Jr. July 1955. 114p. diagrs., tab. (NACA TN 3421)

LOW-SPEED STATIC LATERAL AND ROLLING STABILITY CHARACTERISTICS OF A SERIES OF CONFIGURATIONS COMPOSED OF INTERSECTING TRIANGULAR PLAN-FORM SURFACES. David F. Thomas, Jr. October 1955. 29p. diagrs., photos. (NACA TN 3532)

A PRELIMINARY INVESTIGATION OF THE EFFECTS OF FREQUENCY AND AMPLITUDE ON THE ROLLING DERIVATIVES OF AN UNSWEPT-WING MODEL OSCILLATING IN ROLL. Lewis R. Fisher, Jacob H. Lichtenstein, and Katherine D. Williams. January 1956. 29p. diagrs., photos. (NACA TN 3554)

LINEARIZED LIFTING-SURFACE AND LIFTING-LINE EVALUATIONS OF SIDEWASH BEHIND ROLLING TRIANGULAR WINGS AT SUPERSONIC SPEEDS. Percy J. Bobbitt. March 1956. 63p. diagrs. (NACA TN 3609)

EXPERIMENTAL MEASUREMENTS OF FORCES AND MOMENTS ON A TWO-DIMENSIONAL OSCILLATING WING AT SUBSONIC SPEEDS. Sherman A. Clevenson and Edward Widmayer, Jr. June 1956. 28p. diagrs., tab. (NACA TN 3686. Supersedes RM L9K28a)

PRELIMINARY WIND-TUNNEL TESTS OF TRIANGULAR AND RECTANGULAR WINGS IN STEADY ROLL AT MACH NUMBERS OF 1.62 AND 1.92. Clinton E. Brown and Harry S. Heinke, Jr. June 1956. 36p. diagrs., tabs. (NACA TN 3740. Supersedes RM L8L30)

(1.8.2) CONTROL

ADDITIONAL STUDIES OF THE STABILITY AND CONTROLLABILITY OF AN UNSWEPT-WING VERTICALLY RISING AIRPLANE MODEL IN HOVERING FLIGHT INCLUDING STUDIES OF VARIOUS TETHERED LANDING TECHNIQUES. William R. Bates, Powell M. Lovell, Jr., and Charles C. Smith, Jr. Movember 1951. 25p. diagrs., photos., tab. (NACA RM L51I07a)

PRELIMINARY DATA AT A MACH NUMBER OF 2.40 OF THE CHARACTERISTICS OF FLAP-TYPE CONTROLS EQUIPPED WITH PLAIN OVERHANG BALANCES. James N. Mueller and K. R. Czarnecki. September 1952. 43p. diagrs., photos. (NACA RM L52F10)

FLIGHT TESTS OF A 0.4-SCALE MODEL OF A STAND-ON TYPE OF VERTICALLY RISING AIRCRAFT. Marion O. McKinney and Lysle P. Parlett. March 1954. 23p. diagrs., photos. (NACA RM L54B16b)

LARGE-SCALE LOW-SPEED WIND-TUNNEL TESTS OF A MODEL HAVING A 60° DELTA HORIZONTAL CANARD CONTROL SURFACE AND WING TO OBTAIN STATIC-LONGITUDINAL-STABILITY AND CANARD-SURFACE HINGE-MOMENT DATA. Dale L. Burrows. June 1954. 21p. diagrs. (NACA RM L54D16a)

(1. 8. 2. 1)
LONGITUDINAL

LOW-SPEED WIND-TUNNEL TESTS OF A PILOTLESS AIRCRAFT HAVING HORIZONTAL AND VERTICAL WINGS AND CRUCIFORM TAIL. N. Mastrocola and A. Assadourian. August 19, 1947. 100p. diagrs., photos., tab. (NACA RM L6J18a)

HIGH-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A FIGHTER AIRPLANE MODEL WITH A SWEPT-BACK WING AND TAIL. Charles P. Morrill, Jr., and Lee E. Boddy. April 14, 1948. 47p. diagrs., photos. (NACA RM A7K28)

THE AERODYNAMIC EFFECTS OF ROCKETS AND FUEL TANKS MOUNTED UNDER THE SWEPT-BACK WING OF AN AIRPLANE MODEL. Lee E. Boddy and Charles P. Morrill. Jr. April 23. 1948. 19p. diagrs. (NACA RM A7J03)

EFFECTS OF SWEEP ON CONTROLS. John G. Lowry, John A. Axelson, and Harold I. Johnson. June 3, 1948. 29p. diagrs. (NACA RM L8A28c)

CONTROL EFFECTIVENESS AND HINGE-MOMENT MEASUREMENTS AT A MACH NUMBER OF 1.9 OF A NOSE FLAP AND TRAILING-EDGE FLAP ON A HIGHLY TAPERED LOW-ASPECT-RATIO WING. D. William Conner and Meade H. Mitchell, Jr. January 10, 1949. 26p. diagrs., photo. (NACA RM L8K17a)

WIND-TUNNEL INVESTIGATION OF A TAILLESS TRIANGULAR-WING FIGHTER AIRCRAFT AT MACH NUMBERS FROM 0.5 TO 1.5. Leslie F. Lawrence and James L. Summers. June 24, 1949. 56p. diagrs., photos., tab. (NACA RM A9B16)

LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF A SEMISPAN WIND-TUNNEL MODEL OF A TAILLESS AIRPLANE AND A COMPARISON WITH COMPLETE-MODEL WIND-TUNNEL TESTS AND SEMISPAN-MODEL WING-FLOW TESTS. Kenneth W. Goodson and Thomas J. King, Jr. October 10, 1949. 63p. diagrs., photos. (NACA RM L9C31)

A STUDY OF SEVERAL FACTORS AFFECTING THE STABILITY CONTRIBUTED BY A HORIZONTAL TAIL AT VARIOUS VERTICAL POSITIONS ON A SWEPTBACK-WING AIRPLANE MODEL. Gerald V. Foster and Roland F. Griner. October 28, 1949. 28p. diagrs., tab. (NACA RM L9H19)

INVESTIGATION OF A THIN WING OF ASPECT RATIO 4 IN THE AMES 12-FOOT PRESSURE WIND TUNNEL. V - STATIC LONGITUDINAL STABILITY AND CONTROL THROUGHOUT THE SUBSONIC SPEED RANGE OF A SEMISPAN MODEL OF A SUPERSONIC AIRPLANE. Ben H. Johnson, Jr., and Francis W. Rollins. December 8, 1949. 130p. diagrs., photos. (NACA RM A9I01)

AERODYNAMIC CHARACTERISTICS AND FLYING QUALITIES OF A TAILLESS TRIANGULAR-WING AIRPLANE CONFIGURATION AS OBTAINED FROM FLIGHTS OF ROCKET-PROPELLED MODELS AT TRANSONIC AND LOW SUPERSONIC SPEEDS. Grady L. Mitcham, Joseph E. Stevens, and Harry P. Norris. February 9, 1950. 67p. diagrs., photos., tabs. (NACA RM L9L07)

ELEVATOR-STABILIZER EFFECTIVENESS AND TRIM OF THE X-1 AIRPLANE TO A MACH NUMBER OF 1.06. Hubert M. Drake and John R. Carden. November 1, 1950. 12p. diagrs. (NACA RM L50G20)

THE LONGITUDINAL STABILITY, CONTROL EFFECTIVENESS, AND CONTROL HINGE-MOMENT CHARACTERISTICS OBTAINED FROM A FLIGHT INVESTIGATION OF A CANARD MISSILE CONFIGURATION AT TRANSONIC AND SUPERSONIC SPEEDS. Roy J. Niewald and Martin T. Moul. November 24, 1950. 43p. diagrs., photos. (NACA RM L50I27)

PRELIMINARY FLIGHT INVESTIGATION OF THE MANEUVERING ACCELERATIONS AND BUFFET BOUNDARY OF A 35° SWEPT-WING AIRPLANE AT HIGH ALTITUDE AND TRANSONIC SPEEDS. George A. Rathert, Jr., Howard L. Ziff, and George E. Cooper. February 21, 1951. 12p. diagrs., photo., tab. (NACA RM A50L04)

DYNAMIC STABILITY AND CONTROL CHARACTERISTICS OF A VERTICALLY RISING AIRPLANE MODEL IN HOVERING FLIGHT. William R. Bates, Powell M. Lovell, Jr., and Charles C. Smith, Jr. February 23, 1951. 16p. diagrs., photos., tab. (NACA RM L50J16)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 2 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL- LONGITUDINAL CHARACTERISTICS. David Graham and David G. Koenig. April 23, 1951. 35p. diagrs., photo., 3 tabs. (NACA RM A51B21)

AN ANALYSIS OF THE EFFECTS OF AEROELASTICITY ON STATIC LONGITUDINAL STABILITY AND CONTROL OF A SWEPT-BACK-WING AIRPLANE. Richard B. Skoog. August 1951. 45p. diagrs. (NACA RM A51C19)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 4 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LONGITUDINAL CHARACTERISTICS. David Graham and David G. Koenig. October 1951. 27p. diagrs., photo., 4 tabs. (NACA RM A51H10a)

DYNAMIC STABILITY AND CONTROL CHARACTERISTICS OF A DELTA-WING VERTICALLY RISING AIRPLANE MODEL IN TAKE-OFFS, LANDINGS, AND HOVERING FLIGHT. Powell M. Lovell, Jr., William R. Bates and Charles C. Smith, Jr. October 1951. 14p. diagrs., photo., tab. (NACA RM L51H13a)

THE STATIC LONGITUDINAL CHARACTERISTICS AT MACH NUMBERS UP TO 0.95 OF A TRIANGULAR-WING CANARD MODEL HAVING A TRIANGULAR CONTROL. Jack D. Stephenson and Ralph Selan. December 1951. 72p. diagrs., photo. (NACA RM A51I07)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 2 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LATERAL CHARACTERISTICS. David Graham and David G. Koenig. February 1952. 38p. diagrs., 2 tabs. (NACA RM A51L03)

SOME FACTORS AFFECTING AUTOMATIC CONTROL OF AIRPLANES. Charles W. Mathews. February 1952. 15p. diagrs. (NACA RM L52A30)

USE OF AN AERODYNAMICALLY PULSED ALL-MOVABLE HORIZONTAL TAIL TO OBTAIN LONGITUDINAL CHARACTERISTICS OF ROCKET-POWERED MODELS IN FREE FLIGHT AND SOME INITIAL RESULTS FROM AN ARROW-WING-BODY-TAIL CONFIGURATION. Warren Gillespie, Jr., and Albert E. Dietz. May 1952. 31p. diagrs., photos. (NACA RM L52C10)

LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS FROM A FLIGHT INVESTIGATION OF A CRUCIFORM CANARD MISSILE CONFIGURATION HAVING AN EXPOSED WING-CANARD AREA RATIO OF 16:1. Martin T. Moul and Andrew R. Wineman. June 1952. 32p. diagrs., photos. (NACA RM L52D24a)

EFFECT OF CAMBER AND TWIST ON THE STABILITY CHARACTERISTICS OF MODELS HAVING A 45° SWEPT WING AS DETERMINED BY THE FREE-FALL METHOD AT TRANSONIC SPEEDS. Maurice D. White. August 1952. 35p. diagrs., photos., tab. (NACA RM A52F16)

LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF A CANARD MISSILE CONFIGURATION FOR MACH NUMBERS FROM 1.1 TO 1.93 AS DETERMINED FROM FREE-FLIGHT AND WIND-TUNNEL INVESTIGATIONS. Howard J. Curfman, Jr., and Carl E. Grigsby. August 1952. 28p. diagrs., tab. (NACA RM L52F06)

THE LONGITUDINAL CHARACTERISTICS AT MACH NUMBERS UP TO 0.9 OF A WING-FUSELAGE-TAIL COMBINATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. Bruce E. Tinling. December 1952. 41p. diagrs., photo., tab. (NACA RM A52I19)

LONGITUDINAL-CONTROL EFFECTIVENESS AND DOWNWASH CHARACTERISTICS AT TRANSONIC SPEEDS OF A 1/30-SCALE SEMISPAN MODEL OF THE BELL X-5 AIRPLANE AS DETERMINED BY THE NACA WING-FLOW METHOD. Norman S. Silsby and Garland J. Morris. January 1953. 48p. diagrs., photos., 2 tabs. (NACA RM L52K12)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE MODEL WITH AN ASPECT RATIO 4 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - HIGH-LIFT DEVICES AND LATERAL CONTROLS. Ralph W. Franks. February 1953. 45p. diagrs., photo., 2 tabs. (NACA RM A52K13)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF TWO AIRPLANE MODELS HAVING ASPECT RATIO 2 TRAPEZOIDAL WINGS OF TAPER RATIOS 0.33 AND 0.20. Ralph W. Franks. February 1953. 56p. diagrs., photos., 3 tabs. (NACA RM A52L16)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 3 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LONGITUDINAL AND LATERAL CHARACTERISTICS. David G. Koenig. April 1953. 61p. diagrs., photos., 4 tabs. (NACA RM A52L15)

LOW-SPEED INVESTIGATION OF THE AERODYNAMIC, CONTROL, AND HINGE-MOMENT CHARACTERISTICS OF TWO TYPES OF CONTROLS ON A DELTA-WING-FUSELAGE MODEL WITH AND WITHOUT NACELLES. William I. Scallion. May 1953. 47p. diagrs., photos., tabs. (NACA RM L53C18)

THE EFFECTS OF NACELLES AND OF EXTENDED SPLIT FLAPS ON THE LONGITUDINAL CHARACTERISTICS OF A WING-FUSELAGE-TAIL COMBINATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. Bruce E. Tinling and Armando E. Lopez. June 1953. 47p. diagrs., tab. (NACA RM A53D06)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH A VARIABLE-INCIDENCE TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL. David G. Koenig. June 1953. 42p. diagrs., photo., tabs. (NACA RM A53D21)

REVIEW AND INVESTIGATION OF UNSATISFACTORY CONTROL CHARACTERISTICS INVOLVING INSTABILITY OF PILOT-AIRPLANE COMBINATION AND METHODS FOR PREDICTING THESE DIFFICULTIES FROM GROUND TESTS. William H. Phillips, B. Porter Brown, and James T. Matthews, Jr. August 1953. 57p. diagrs., photos. (NACA RM L53F17a)

A TRANSONIC WIND-TUNNEL INVESTIGATION OF THE LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF A 0.09-SCALE MODEL OF THE BELL X-5 RESEARCH AIRPLANE AND COMPARISON WITH FLIGHT. Ralph P. Bielat and George S. Campbell. October 1953. 65p. diagrs., photo. (NACA RM L53H18)

FREE-FLIGHT-TUNNEL INVESTIGATION OF THE LOW-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A CANARD AIRPLANE MODEL. Joseph L. Johnson, Jr., and John W. Paulson. October 1953. 37p. diagrs., photo., 2 tabs. (NACA RM L53I11)

THE RESULTS OF WIND-TUNNEL TESTS AT LOW SPEEDS OF A FOUR-ENGINE PROPELLER-DRIVEN AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. George G. Edwards, Donald A. Buell, and Jerald K. Dickson. December 1953. 121p. diagrs., photo., tabs. (NACA RM A53I28)

THE EFFECTS OF OPERATING PROPELLERS ON THE LONGITUDINAL CHARACTERISTICS AT HIGH SUBSONIC SPEEDS OF A FOUR-ENGINE TRACTOR AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. Fred B. Sutton and Fred A. Demele. January 1954. 106p. diagrs., photo., 11 tabs. (NACA RM A53J23)

HINGE-MOMENT, LIFT, AND PITCHING-MOMENT CHARACTERISTICS OF A FLAP-TYPE CONTROL SURFACE HAVING VARIOUS HINGE-LINE LOCATIONS ON A 4-PERCENT-THICK 60° DELTA WING. TRANSONIC-BUMP METHOD. Robert F. Thompson. March 1954. 73p. diagrs., photo. (NACA RM L54B08)

DYNAMIC STABILITY AND CONTROL CHARACTERISTICS OF A DUCTED-FAN MODEL IN HOVERING FLIGHT. Robert H. Kirby. April 1954. 16p. diagrs., photos. (NACA RM L54C18)

THE EFFECT OF BLUNT-TRAILING-EDGE MODIFICATIONS ON THE HIGH-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A SWEPT-WING FIGHTER AIRPLANE. Melvin Sadoff, Frederick H. Matteson, and Rudolph D. Van Dyke, Jr. May 1954. 55p. diagrs., photos., tab. (NACA RM A54C31)

ANALYSIS OF WIND-TUNNEL TESTS AT LOW SPEEDS OF A FOUR-ENGINE PROPELLER-DRIVEN AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK. George G. Edwards and Donald A. Buell. October 1954. 137p. diagrs., photos., 2 tabs. (NACA RM A54F14)

A METHOD FOR THE DESIGN OF SWEPTBACK WINGS WARPED TO PRODUCE SPECIFIED FLIGHT CHARACTERISTICS AT SUPERSONIC SPEEDS. Warren A. Tucker. 1955. i, 17p. diagrs., tabs. (NACA Rept. 1226. Supersedes RM L51F08)

A FLIGHT EVALUATION OF THE LONGITUDINAL STABILITY CHARACTERISTICS ASSOCIATED WITH THE PITCH-UP OF A SWEPT-WING AIRPLANE IN MANEUVERING FLIGHT AT TRANSONIC SPEEDS. Seth B. Anderson and Richard S. Bray. 1955. ii, 12p. diagrs., photo., tab. (NACA Rept. 1237. Supersedes RM A51I12)

FLIGHT DETERMINATION OF THE LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 58.7° SWEEPBACK. Thomas W. Finch. May 1955. 30p. diagrs., photo., tab. (NACA RM H55C07)

SUMMARY OF RESULTS OF A WIND-TUNNEL INVESTIGATION OF NINE RELATED HORIZONTAL TAILS. Jules B. Dods, Jr. and Bruce E. Tinling. July 1955. 105p. diagrs., 2 tabs. (NACA TN 3497. Formerly RM A51G31a)

HOVERING-FLIGHT TESTS OF A MODEL OF A TRANSPORT VERTICAL-TAKE-OFF AIRPLANE WITH TILTING WING AND PROPELLERS. Powell M. Lovell, Jr., and Lysle P. Parlett. March 1956. 23p. diagrs., photo., tab. (NACA TN 3630)

SOME EFFECTS OF FUSELAGE FLEXIBILITY ON LONGITUDINAL STABILITY AND CONTROL. Bernard B. Klawans and Harold I. Johnson. April 1956. 42p. diagrs., tab. (NACA TN 3543)

ANALYSIS OF A VANE-CONTROLLED GUST-ALLEVIATION SYSTEM. Robert W. Boucher and Christopher C. Kraft, Jr. April 1956. 45p. diagrs., tabs. (NACA TN 3597)

INVESTIGATION AT ZERO FORWARD SPEED OF A LEADING-EDGE SLAT AS A LONGITUDINAL CONTROL DEVICE FOR VERTICALLY RISING AIRPLANES THAT UTILIZE THE REDIRECTED-SLIPSTREAM PRINCIPLE. Richard E. Kuhn. May 1956. 33p. diagrs., photos. (NACA TN 3692)

(1. 8. 2. 2) LATERAL

FREE-FLIGHT INVESTIGATION OF CONTROL EFFECTIVENESS OF FULL-SPAN, 0.2-CHORD PLAIN AILERONS AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS TO DETERMINE SOME EFFECTS OF WING SWEEPBACK, TAPER, ASPECT RATIO, AND SECTION-THICKNESS RATIO. Carl A. Sandahl. August 13, 1947. 16p. diagrs., photos., tab. (NACA RM L7F30)

FLIGHT INVESTIGATION TO DETERMINE THE HINGE MOMENTS OF A BEVELED-EDGE AILERON ON A 45° SWEPTBACK WING AT TRANSONIC AND LOW SUPERSONIC SPEEDS. William N. Gardner and Howard J. Curfman, Jr. November 12, 1947. 20p. diagrs., photos. (NACA RM L7H26)

THE HIGH-SPEED AERODYNAMIC EFFECTS OF MODIFICATIONS TO THE WING AND WING-FUSELAGE INTERSECTION OF AN AIRPLANE MODEL WITH THE WING SWEPT BACK 35°. Lee E. Boddy and Charles P. Morrill, Jr. February 18, 1948. 34p. diagrs., photos. (NACA RM A7J02)

HIGH-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A FIGHTER AIRPLANE MODEL WITH A SWEPT-BACK WING AND TAIL. Charles P. Morrill, Jr., and Lee E. Boddy. April 14, 1948. 47p. diagrs., photos. (NACA RM A7K28)

THE AERODYNAMIC EFFECTS OF ROCKETS AND FUEL TANKS MOUNTED UNDER THE SWEPT-BACK WING OF AN AIRPLANE MODEL. Lee E. Boddy and Charles P. Morrill, Jr. April 23, 1948. 19p. diagrs. (NACA RM A7J03)

ADDITIONAL RESULTS IN A FREE-FLIGHT INVESTIGATION OF CONTROL EFFECTIVENESS OF FULL-SPAN, 0.2-CHORD PLAIN AILERONS AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS TO DETERMINE SOME EFFECTS OF WING SWEEPBACK, ASPECT RATIO, TAPER, AND SECTION THICKNESS RATIO. Carl A. Sandahl and H. Kurt Strass. April 23, 1948. 31p. diagrs., photos. (NACA RM L7L01)

EFFECTS OF SWEEP ON CONTROLS. John G. Lowry, John A. Axelson, and Harold I. Johnson. June 3, 1948. 29p. diagrs. (NACA RM L8A28c)

FREE-FLIGHT INVESTIGATION OF THE ROLLING EFFECTIVENESS AT HIGH SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS OF LEADING-EDGE AND TRAILING-EDGE AILERONS IN CONJUNCTION WITH TAPERED AND UNTAPERED PLAN FORMS. H. Kurt Strass. July 23, 1948. 19p. diagrs., photos. (NACA RM L8E10)

FREE-FLIGHT INVESTIGATION OF THE ROLLING EFFECTIVENESS OF SEVERAL DELTA WING - AILERON CONFIGURATIONS AT TRANSONIC AND SUPERSONIC SPEEDS. Carl A. Sandahl. August 27, 1948. 19p. diagrs., photos., tab. (NACA RM L8D16)

FREE-FLIGHT INVESTIGATION AT TRANSONIC AND SUPERSONIC SPEEDS OF THE ROLLING EFFECTIVENESS OF A THIN, UNSWEPT WING HAVING PARTIAL-SPAN AILERONS. Carl A. Sandahl. October 22, 1948. 13p. diagrs., photos., tab. (NACA RM L8G20a)

INVESTIGATION OF A THIN WING OF ASPECT RATIO 4 IN THE AMES 12-FOOT PRESSURE WIND TUNNEL. III - THE EFFECTIVENESS OF A CONSTANT-CHORD AILERON. Ben H. Johnson, Jr., and Fred A. Demele. November 19, 1948. 26p. diagrs., photo. (NACA RM A8I17)

CONTROL EFFECTIVENESS AND HINGE-MOMENT MEASUREMENTS AT A MACH NUMBER OF 1.9 OF A NOSE FLAP AND TRAILING-EDGE FLAP ON A HIGHLY TAPERED LOW-ASPECT-RATIO WING. D. William Conner and Meade H. Mitchell, Jr. January 10, 1949. 26p. diagrs., photo. (NACA RM L8K17a)

FREE-FLIGHT INVESTIGATION AT TRANSONIC AND SUPERSONIC SPEEDS OF THE ROLLING EFFECTIVENESS OF SEVERAL AILERON CONFIGURATIONS ON A TAPERED WING HAVING 42.7° SWEEPBACK. Carl A. Sandahl. January 11, 1949. 23p. diagrs., photos., tab. (NACA RM L8K23)

EXPERIMENTAL AND CALCULATED HINGE MOMENTS OF TWO AILERONS ON A 42.7° SWEPTBACK WING AT A MACH NUMBER OF 1.9. James C. Sivells and Kennith L. Goin. January 19, 1949. 23p. diagrs., photos., tabs. (NACA RM L8K24a)

INVESTIGATION AT A MACH NUMBER OF 1.9 AND A REYNOLDS NUMBER OF 2.2 x 10^6 OF SEVERAL FLAP-TYPE LATERAL-CONTROL DEVICES ON A WING HAVING 42.7° SWEEPBACK OF THE LEADING EDGE. Kennith L. Goin. March 11, 1949. 28p. diagrs., photos., tabs. (NACA RM L9A18a)

EFFECTS OF SOME AIRFOIL-SECTION VARIATIONS ON WING-AILERON ROLLING EFFECTIVENESS AND DRAG AS DETERMINED IN FREE FLIGHT AT TRANSONIC AND SUPERSONIC SPEEDS. Carl A. Sandahl, William M. Bland, Jr., and H. Kurt Strass. July 22, 1949. 29p. diagrs., photos., tabs. (NACA RM L9D12)

MEASUREMENTS OF AILERON EFFECTIVENESS OF THE BELL X-1 AIRPLANE AT MACH NUMBERS BETWEEN 0.9 AND 1.06. Hubert M. Drake. August 4, 1949. 5p. diagrs. (NACA RM L9G19a)

THE EFFECT OF SPANWISE AILERON LOCATION ON THE ROLLING EFFECTIVENESS OF WINGS WITH 0° AND 45° SWEEP AT SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS. H. Kurt Strass. April 25, 1950. 28p. diagrs., photo. (NACA RM L50A27)

FREE-FLIGHT INVESTIGATION AT TRANSONIC AND SUPERSONIC SPEEDS OF THE ROLLING EFFECTIVENESS OF A PARTIAL-SPAN AILERON ON AN INVERSELY TAPERED SWEPTBACK WING. H. Kurt Strass, E. M. Fields, and E. D. Schult. May 1, 1950. 17p. diagrs., photo., tabs. (NACA RM L50B08)

ROLLING EFFECTIVENESS OF A THIN TAPERED WING HAVING PARTIAL-SPAN AILERONS AS DETERMINED BY ROCKET-POWERED TEST VEHICLES. Carl A. Sandahl and H. Kurt Strass. May 23, 1950. 12p. diagrs., photo. (NACA RM L50D17)

WING-DROPPING CHARACTERISTICS OF SOME STRAIGHT AND SWEPT WINGS AT TRANSONIC SPEEDS AS DETERMINED WITH ROCKET-POWERED MODELS. David G. Stone. May 26, 1950. 12p. diagrs., tab. (NACA RM L50C01)

EXPERIMENTAL DETERMINATION OF EFFECT OF STRUCTURAL RIGIDITY ON ROLLING EFFECTIVENESS OF SOME STRAIGHT AND SWEPT WINGS AT MACH NUMBERS FROM 0.7 TO 1.7. H. Kurt Strass, E. M. Fields, and Paul E. Purser. October 4, 1950. 40p. diagrs., photo., tab. (NACA RM L50G14b)

DYNAMIC STABILITY AND CONTROL CHARACTERISTICS OF A VERTICALLY RISING AIRPLANE MODEL IN HOVERING FLIGHT. William R. Bates, Powell M. Lovell, Jr., and Charles C. Smith, Jr. February 23, 1951. 16p. diagrs., photos., tab. (NACA RM L50J16)

WIND-TUNNEL INVESTIGATION AT SUBSONIC AND LOW TRANSONIC SPEEDS OF THE EFFECTS OF AILERON SPAN AND SPANWISE LOCATION ON THE ROLLING CHARACTERISTICS OF A TEST VEHICLE WITH THREE UNTAPERED 45° SWEPTBACK WINGS. Harold S. Johnson. April 6, 1951. 26p. diagrs., photo., tab. (NACA RM L51B16)

COMPARISONS OF THE EFFECTIVENESS AND HINGE MOMENTS OF ALL-MOVABLE DELTA AND FLAP-TYPE CONTROLS ON VARIOUS WINGS. David G. Stone. April 19, 1951. 13p. diagrs. (NACA RM L51C22)

SOME EFFECTS OF SPANWISE AILERON LOCATION AND WING STRUCTURAL RIGIDITY ON THE ROLLING EFFECTIVENESS OF 0.3-CHORD FLAP-TYPE AILERONS ON A TAPERED WING HAVING 63° SWEEPBACK AT THE LEADING EDGE AND NACA 64A005 AIRFOIL SECTIONS. H. Kurt Strass, E. M. Fields, and Eugene D. Schult. June 1951. 25p. diagrs., photo., tab. (NACA RM L51D18a)

(1) AERODYNAMICS

ROLLING EFFECTIVENESS OF ALL-MOVABLE WINGS AT SMALL ANGLES OF INCIDENCE AT MACH NUMBERS FROM 0.6 TO 1.6. H. Kurt Strass and Edward T. Marley. October 1951. 16p. diagrs., photo., tab. (NACA RM L51H03)

DYNAMIC STABILITY AND CONTROL CHARACTERISTICS OF A DELTA-WING VERTICALLY RISING AIRPLANE MODEL IN TAKE-OFFS, LANDINGS, AND HOVERING FLIGHT. Powell M. Lovell, Jr., William R. Bates and Charles C. Smith, Jr. October 1951. 14p. diagrs., photo., tab. (NACA RM L51H13a)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 2 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LATERAL CHARACTERISTICS. David Graham and David G. Koenig. February 1952. 38p. diagrs., 2 tabs. (NACA RM A51L03)

SOME FACTORS AFFECTING AUTOMATIC CONTROL OF AIRPLANES. Charles W. Mathews. February 1952. 15p. diagrs. (NACA RM L52A30)

LOW-SPEED LATERAL-CONTROL CHARACTERISTICS OF AN UNSWEPT WING WITH HEXAGONAL AIRFOIL SECTIONS AND ASPECT RATIO 2.5 EQUIPPED WITH SPOILERS AND WITH SHARP- AND THICKENED-TRAILING-EDGE FLAP-TYPE AILERONS AT A REYNOLDS NUMBER OF 7.6×10^6 James E. Fitzpatrick and Robert L. Woods. April 1952. 58p. photos., diagrs., tab. (NACA RM L52B15)

FREE-FLIGHT INVESTIGATION AT ZERO LIFT IN THE MACH NUMBER RANGE BETWEEN 0.7 AND 1.4 TO DETERMINE THE EFFECTIVENESS OF AN INSET TAB AS A MEANS OF AERODYNAMICALLY RELIEVING AILERON HINGE MOMENTS. William M. Bland, Jr., and Edward T. Marley. January 1953. 19p. diagrs., photos. (NACA RM L52K07)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE MODEL WITH AN ASPECT RATIO 4 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - HIGH-LIFT DEVICES AND LATERAL CONTROLS. Ralph W. Franks. February 1953. 45p. diagrs., photo., 2 tabs. (NACA RM A52K13)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF TWO AIRPLANE MODELS HAVING ASPECT RATIO 2 TRAPEZOIDAL WINGS OF TAPER RATIOS 0.33 AND 0.20. Ralph W. Franks. February 1953. 56p. diagrs., photos., 3 tabs. (NACA RM A52L16)

FLIGHT MEASUREMENTS OF THE STABILITY CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE IN SIDESLIPS AT 59° SWEEPBACK. Joan M. Childs. February 1953. 23p. diagrs., photos., tab. (NACA RM L52K13b)

PRELIMINARY RESULTS OF STABILITY AND CONTROL INVESTIGATION OF THE BELL X-5 RESEARCH AIRPLANE. Thomas W. Finch and Donald W. Briggs. February 1953. 35p. diagrs., photos., tabs. (NACA RM L52K18b)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 3 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LONGITUDINAL AND LATERAL CHARACTERISTICS. David G. Koenig. April 1953. 61p. diagrs., photos., 4 tabs. (NACA RM A52L15)

LOW-SPEED AILERON EFFECTIVENESS AS DETERMINED BY FORCE TESTS AND VISUAL-FLOW OBSERVATIONS ON A 52° SWEPTBACK WING WITH AND WITHOUT CHORD-EXTENSIONS. Patrick A. Cancro. April 1953. 38p. diagrs., photos. (NACA RM L53B26)

INVESTIGATION OF THE EFFECTS OF WING AND TAIL MODIFICATIONS ON THE LOW-SPEED STABILITY CHARACTERISTICS OF A MODEL HAVING A THIN 40° SWEPT WING OF ASPECT RATIO 3.5. Joseph Weil, William C. Sleeman, Jr., and Andrew L. Byrnes, Jr. April 1953. 95p. diagrs., photos., tab. (NACA RM L53C09)

LOW-SPEED INVESTIGATION OF THE AERODYNAMIC, CONTROL, AND HINGE-MOMENT CHARACTERISTICS OF TWO TYPES OF CONTROLS ON A DELTA-WING-FUSELAGE MODEL WITH AND WITHOUT NACELLES. William I. Scallion. May 1953. 47p. diagrs., photos., tabs. (NACA RM L53C18)

WIND-TUNNEL INVESTIGATION AT HIGH SUBSONIC SPEEDS OF A SPOILER-SLOT-DEFLECTOR COMBINATION ON AN NACA 65A006 WING WITH QUARTER-CHORD LINE SWEPT BACK 32.6°. Raymond D. Vogler. May 1953. 24p. diagrs. (NACA RM L53D17)

THE LATERAL CONTROL CHARACTERISTICS OF CONSTANT-PERCENT-CHORD TRAILING-EDGE ELEVONS ON A POINTED WING OF ASPECT RATIO 2 AT MACH NUMBERS UP TO 0.95. Verlin D. Reed and Donald W. Smith. August 1953. 105p. diagrs., photo., tabs. (NACA RM A53F03)

LOW-SPEED WIND-TUNNEL INVESTIGATION OF A JET CONTROL ON A 35° SWEPT WING. John G. Lowry and Thomas R. Turner. October 1953. 9p. diagrs. (NACA RM L53I09a)

SOME EFFECTS OF AEROELASTICITY AND SWEEPBACK ON THE ROLLING EFFECTIVENESS AND DRAG OF A 1/11-SCALE MODEL OF THE BELL X-5 AIRPLANE WING AT MACH NUMBERS FROM 0.6 TO 1.5. Roland D. English. November 1953. 21p. diagrs., photos. (NACA RM L53I18b)

HINGE-MOMENT, LIFT, AND PITCHING-MOMENT CHARACTERISTICS OF A FLAP-TYPE CONTROL SURFACE HAVING VARIOUS HINGE-LINE LOCATIONS ON A 4-PERCENT-THICK 60° DELTA WING. TRANSONIC-BUMP METHOD. Robert F. Thompson. March 1954. 73p. diagrs., photo. (NACA RM L54B08)

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EFFECT AT TRANSONIC SPEEDS OF INBOARD SPOILERS ON THE STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A 45° SWEPTBACK WING-BODY COMBINATION HAVING A LEADING-EDGE CHORD-EXTENSION. James H. Henderson. June 1954. 24p. diagrs., photo. (NACA RM L54D13)

COMPARISON BETWEEN THEORETICAL AND EXPERIMENTAL RATES OF ROLL OF TWO MODELS WITH FLEXIBLE RECTANGULAR WINGS AT SUPERSONIC SPEEDS. John M. Hedgepeth and Robert J. Kell. August 1954. 21p. diagrs., photo., tabs. (NACA RM L54F23)

CHARTS FOR ESTIMATING TAIL-ROTOR CONTRIBUTION TO HELICOPTER DIRECTIONAL STABILITY AND CONTROL IN LOW-SPEED FLIGHT. Kenneth B. Amer and Alfred Gessow. 1955. ii, 22p. diagrs., photo., tabs. (NACA Rept. 1216. Supersedes TN 3156)

THE EFFECTIVENESS OF WING VORTEX GENERATORS IN IMPROVING THE MANEUVERING CHARACTERISTICS OF A SWEPT-WING AIRPLANE AT TRANSONIC SPEEDS. Norman M. McFadden, George A. Rathert, Jr., and Richard S. Bray. September 1955. 43p. diagrs., photos., tab. (NACA TN 3523. Supersedes RM A51J18)

THEORETICAL ANALYSIS OF LINKED LEADING-EDGE AND TRAILING-EDGE FLAP-TYPE CONTROLS AT SUPERSONIC SPEEDS. E. Carson Yates, Jr. March 1956. 40p. diagrs., tab. (NACA TN 3617)

HOVERING-FLIGHT TESTS OF A MODEL OF A TRANSPORT VERTICAL-TAKE-OFF AIRPLANE WITH TILTING WING AND PROPELLERS. Powell M. Lovell, Jr., and Lysle P. Parlett. March 1956. 23p diagrs., photo., tab. (NACA TN 3630)

ANALYTICAL STUDY OF MODIFICATIONS TO THE AUTOPILOT OF A FIGHTER AIRPLANE IN ORDER TO REDUCE THE RESPONSE TO SIDE GUSTS. Charles W. Mathews and James J. Adams. March 1956. 35p. diagrs., tabs. (NACA TN 3635)

FLIGHT INVESTIGATION OF THE EFFECTIVENESS OF AN AUTOMATIC AILERON TRIM CONTROL DEVICE FOR PERSONAL AIRPLANES. William H. Phillips, Helmut A. Kuehnel and James B. Whitten. April 1956. 42p. diagrs., photos., tab. (NACA TN 3637)

INVESTIGATION OF LATERAL CONTROL NEAR THE STALL. FLIGHT TESTS WITH HIGH-WING AND LOW-WING MONOPLANES OF VARIOUS CONFIGURATIONS. Fred E. Weick and H. Norman Abramson, Agricultural and Mechanical College of Texas. June 1956. 34p. diagrs., photos., tabs. (NACA TN 3676)

INVESTIGATION OF LATERAL CONTROL NEAR THE STALL. ANALYSIS FOR REQUIRED LONGITUDINAL TRIM CHARACTERISTICS AND DISCUSSION OF DESIGN VARIABLES. Fred E. Weick and H. Norman Abramson, Agricultural and Mechanical College of Texas. June 1956. 91p. diagrs., tabs. (NACA TN 3677)

(1. 8. 2. 3)
DIRECTIONAL

EFFECTS OF SWEEP ON CONTROLS. John G. Lowry, John A. Axelson, and Harold I. Johnson. June 3, 1948. 29p. diagrs. (NACA RM L8A28c)

AERODYNAMIC STUDY OF A WING-FUSELAGE COMBINATION EMPLOYING A WING SWEPT BACK 63°. - AERODYNAMIC CHARACTERISTICS IN SIDESLIP OF A LARGE-SCALE MODEL HAVING A 63° SWEPT-BACK VERTICAL TAIL. Gerald M. McCormack. October 7, 1949. 26p. diagrs., photos. (NACA RM A9F14)

FLIGHT DETERMINATION OF THE EFFECTS OF RUDDER-PEDAL-FORCE CHARACTERISTICS ON THE AIMING ERROR IN AZIMUTH OF A CONVENTIONAL FIGHTER AIRPLANE. Lee Winograd and Rudolph D. Van Dyke, Jr. July 5, 1950. 32p. diagrs., photos., tab. (NACA RM A50D06)

EFFECT OF THE PROXIMITY OF THE GROUND ON THE STABILITY AND CONTROL CHARACTERISTICS OF A VERTICALLY RISING AIRPLANE MODEL IN THE HOVERING CONDITION. Charles C. Smith, Jr., Powell M. Lovell, Jr., and William R. Bates. September 1951. 16p. diagrs., tab. (NACA RM L51G05)

TESTS IN THE AMES 40- BY 80-FOOT WIND TUNNEL OF AN AIRPLANE CONFIGURATION WITH AN ASPECT RATIO 2 TRIANGULAR WING AND AN ALL-MOVABLE HORIZONTAL TAIL - LATERAL CHARACTERISTICS. David Graham and David G. Koenig. February 1952. 38p. diagrs., 2 tabs. (NACA RM A51L03)

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A STUDY OF THE CHARACTERISTICS OF HUMAN-PILOT CONTROL RESPONSE TO SIMULATED AIRCRAFT LATERAL MOTIONS. Donald C. Cheatham. 1954. ii, 14p. diagrs., photos., tab. (NACA Rept. 1197. Formerly RM L52C17)

SUMMARY OF RESULTS OF A WIND-TUNNEL INVESTIGATION OF NINE RELATED HORIZONTAL TAILS. Jules B. Dods, Jr. and Bruce E. Tinling. July 1955. 105p. diagrs., 2 tabs. (NACA TN 3497. Formerly RM A51G31a)

HOVERING-FLIGHT TESTS OF A MODEL OF A TRANSPORT VERTICAL-TAKE-OFF AIRPLANE WITH TILTING WING AND PROPELLERS. Powell M. Lovell, Jr., and Lysle P. Parlett. March 1956. 23p diagrs., photo., tab. (NACA TN 3630)

ANALYTICAL STUDY OF MODIFICATIONS TO THE AUTOPILOT OF A FIGHTER AIRPLANE IN ORDER TO REDUCE THE RESPONSE TO SIDE GUSTS. Charles W. Mathews and James J. Adams. March 1956. 35p. diagrs., tabs. (NACA TN 3635)

(1. 8. 2. 4)
AIR BRAKES

HIGH-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A FIGHTER AIRPLANE MODEL WITH A SWEPT-BACK WING AND TAIL. Charles P. Morrill, Jr., and Lee E. Boddy. April 14, 1948. 47p. diagrs., photos. (NACA RM A7K28)

EFFECT AT TRANSONIC SPEEDS OF INBOARD SPOILERS ON THE STATIC LONGITUDINAL STABILITY CHARACTERISTICS OF A 45° SWEPTBACK WING-BODY COMBINATION HAVING A LEADING-EDGE CHORD-EXTENSION. James H. Henderson. June 1954. 24p. diagrs., photo. (NACA RM L54D13)

PRELIMINARY PERFORMANCE DATA OF SEVERAL TAIL-PIPE-CASCADE-TYPE MODEL THRUST REVERSERS. James G. Henzel, Jr. and Jack G. McArdle. August 1955. 48p. diagrs., photos., tab. (NACA RM E55F09)

(1. 8. 2. 5)
HINGE MOMENTS

FLIGHT INVESTIGATION TO DETERMINE THE HINGE MOMENTS OF A BEVELED-EDGE AILERON ON A 45° SWEPTBACK WING AT TRANSONIC AND LOW SUPERSONIC SPEEDS. William N. Gardner and Howard J. Curfman, Jr. November 12, 1947. 20p. diagrs., photos. (NACA RM L7H26)

THE HIGH-SPEED AERODYNAMIC EFFECTS OF MODIFICATIONS TO THE WING AND WING-FUSELAGE INTERSECTION OF AN AIRPLANE MODEL WITH THE WING SWEPT BACK 35°. Lee E. Boddy and Charles P. Morrill, Jr. February 18, 1948. 34p. diagrs., photos. (NACA RM A7J02)

HIGH-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A FIGHTER AIRPLANE MODEL WITH A SWEPT-BACK WING AND TAIL. Charles P. Morrill, Jr., and Lee E. Boddy. April 14, 1948. 47p. diagrs., photos. (NACA RM A7K28)

EFFECTS OF SWEEP ON CONTROLS. John G. Lowry, John A. Axelson, and Harold I. Johnson. June 3, 1948. 29p. diagrs. (NACA RM L8A28c)

CONTROL EFFECTIVENESS AND HINGE-MOMENT MEASUREMENTS AT A MACH NUMBER OF 1.9 OF A NOSE FLAP AND TRAILING-EDGE FLAP ON A HIGHLY TAPERED LOW-ASPECT-RATIO WING. D. William Conner and Meade H. Mitchell, Jr. January 10, 1949. 26p. diagrs., photo. (NACA RM L8K17a)

HINGE-MOMENT MEASUREMENTS OF A WING WITH LEADING-EDGE AND TRAILING-EDGE FLAPS AT A MACH NUMBER OF 1.93. William B. Boatright and Robert W. Rainey. January 14, 1949. 12p. diagrs., tab. (NACA RM L8K12a)

EXPERIMENTAL AND CALCULATED HINGE MOMENTS OF TWO AILERONS ON A 42.7° SWEPT-BACK WING AT A MACH NUMBER OF 1.9. James C. Sivells and Kennith L. Goin. January 19, 1949. 23p. diagrs., photos., tabs. (NACA RM L8K24a)

AERODYNAMIC STUDY OF A WING-FUSELAGE COMBINATION EMPLOYING A WING SWEPT BACK 63°. - AERODYNAMIC CHARACTERISTICS IN SIDESLIP OF A LARGE-SCALE MODEL HAVING A 63° SWEPT-BACK VERTICAL TAIL. Gerald M. McCormack. October 7, 1949. 26p. diagrs., photos. (NACA RM A9F14)

AERODYNAMIC CHARACTERISTICS AND FLYING QUALITIES OF A TAILLESS TRIANGULAR-WING AIRPLANE CONFIGURATION AS OBTAINED FROM FLIGHTS OF ROCKET-PROPELLED MODELS AT TRANSONIC AND LOW SUPERSONIC SPEEDS. Grady L. Mitcham, Joseph E. Stevens, and Harry P. Norris. February 9, 1950. 67p. diagrs., photos., tabs. (NACA RM L9L07)

THE TRANSONIC CHARACTERISTICS OF A LOW-ASPECT-RATIO TRIANGULAR WING WITH A CONSTANT-CHORD FLAP AS DETERMINED BY WING-FLOW TESTS, INCLUDING CORRELATION WITH LARGE-SCALE TESTS. George A. Rathert, Jr., L. Stewart Rolls, and Carl M. Hanson. July 18, 1950. 39p. diagrs., photo. (NACA RM A50E10)

THE LONGITUDINAL STABILITY, CONTROL EFFECTIVENESS, AND CONTROL HINGE-MOMENT CHARACTERISTICS OBTAINED FROM A FLIGHT INVESTIGATION OF A CANARD MISSILE CONFIGURATION AT TRANSONIC AND SUPERSONIC SPEEDS. Roy J. Niewald and Martin T. Moul. November 24, 1950. 43p. diagrs., photos. (NACA RM L50I27)

COMPARISONS OF THE EFFECTIVENESS AND HINGE MOMENTS OF ALL-MOVABLE DELTA AND FLAP-TYPE CONTROLS ON VARIOUS WINGS. David G. Stone. April 19, 1951. 13p. diagrs. (NACA RM L51C22)

LOW-SPEED LATERAL-CONTROL CHARACTERISTICS OF AN UNSWEPT WING WITH HEXAGONAL AIRFOIL SECTIONS AND ASPECT RATIO 2.5 EQUIPPED WITH SPOILERS AND WITH SHARP- AND THICKENED-TRAILING-EDGE FLAP-TYPE AILERONS AT A REYNOLDS NUMBER OF 7.6×10^6 James E. Fitzpatrick and Robert L. Woods. April 1952. 58p. photos., diagrs., tab. (NACA RM L52B15)

PRELIMINARY DATA AT A MACH NUMBER OF 2.40 OF THE CHARACTERISTICS OF FLAP-TYPE CONTROLS EQUIPPED WITH PLAIN OVERHANG BALANCES. James N. Mueller and K. R. Czarnecki. September 1952. 43p. diagrs., photos. (NACA RM L52F10)

FREE-FLIGHT INVESTIGATION AT ZERO LIFT IN THE MACH NUMBER RANGE BETWEEN 0.7 AND 1.4 TO DETERMINE THE EFFECTIVENESS OF AN INSET TAB AS A MEANS OF AERODYNAMICALLY RELIEVING AILERON HINGE MOMENTS. William M. Bland, Jr., and Edward T. Marley. January 1953. 19p. diagrs., photos. (NACA RM L52K07)

LOW-SPEED INVESTIGATION OF THE AERODYNAMIC, CONTROL, AND HINGE-MOMENT CHARACTERISTICS OF TWO TYPES OF CONTROLS ON A DELTA-WING-FUSELAGE MODEL WITH AND WITHOUT NACELLES. William I. Scallion. May 1953. 47p. diagrs., photos., tabs. (NACA RM L53C18)

AILERON AND ELEVATOR HINGE MOMENTS OF THE BELL X-1 AIRPLANE MEASURED IN TRANSONIC FLIGHT. Hubert M. Drake and John B. McKay. June 1953. 27p. diagrs. (NACA RM L53E04)

THE LATERAL CONTROL CHARACTERISTICS OF CONSTANT-PERCENT-CHORD TRAILING-EDGE ELEVONS ON A POINTED WING OF ASPECT RATIO 2 AT MACH NUMBERS UP TO 0.95. Verlin D. Reed and Donald W. Smith. August 1953. 105p. diagrs., photo., tabs. (NACA RM A53F03)

A TRANSONIC WIND-TUNNEL INVESTIGATION OF THE LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF A 0.09-SCALE MODEL OF THE BELL X-5 RESEARCH AIRPLANE AND COMPARISON WITH FLIGHT. Ralph P. Bielat and George S. Campbell. October 1953. 65p. diagrs., photo. (NACA RM L53H18)

HINGE-MOMENT, LIFT, AND PITCHING-MOMENT CHARACTERISTICS OF A FLAP-TYPE CONTROL SURFACE HAVING VARIOUS HINGE-LINE LOCATIONS ON A 4-PERCENT-THICK 60° DELTA WING. TRANSONIC-BUMP METHOD. Robert F. Thompson. March 1954. 73p. diagrs., photo. (NACA RM L54B08)

LARGE-SCALE LOW-SPEED WIND-TUNNEL TESTS OF A MODEL HAVING A 60° DELTA HORIZONTAL CANARD CONTROL SURFACE AND WING TO OBTAIN STATIC-LONGITUDINAL-STABILITY AND CANARD-SURFACE HINGE-MOMENT DATA. Dale L. Burrows. June 1954. 21p. diagrs. (NACA RM L54D16a)

SUMMARY OF RESULTS OF A WIND-TUNNEL INVESTIGATION OF NINE RELATED HORIZONTAL TAILS. Jules B. Dods, Jr. and Bruce E. Tinling. July 1955. 105p. diagrs., 2 tabs. (NACA TN 3497. Formerly RM A51G31a)

THEORETICAL ANALYSIS OF LINKED LEADING-EDGE AND TRAILING-EDGE FLAP-TYPE CONTROLS AT SUPERSONIC SPEEDS. E. Carson Yates, Jr. March 1956. 40p. diagrs., tab. (NACA TN 3617)

(1. 8. 2. 6) AUTOMATIC

ROCKET-POWERED FLIGHT TEST OF A ROLL-STABILIZED SUPERSONIC MISSILE CONFIGURATION. Robert A. Gardiner and Jacob Zarovsky. January 12, 1950. 32p. diagrs., photos., tab. (NACA RM L9K01a)

FLIGHT INVESTIGATION OF A ROLL-STABILIZED MISSILE CONFIGURATION AT VARYING ANGLES OF ATTACK AT MACH NUMBERS BETWEEN 0.8 AND 1.79. Jacob Zarovsky and Robert A. Gardiner. March 6, 1951. 38p. diagrs., photos., tab. (NACA RM L50H21)

SOME FACTORS AFFECTING AUTOMATIC CONTROL OF AIRPLANES. Charles W. Mathews. February 1952. 15p. diagrs. (NACA RM L52A30)

THEORETICAL INVESTIGATION OF SOME DISCONTINUOUS YAW DAMPERS. William H. Phillips and Helmut A. Kuehnel. April 1954. 39p. diagrs. (NACA RM L54B24a)

THEORETICAL AND ANALOG STUDIES OF THE EFFECTS OF NONLINEAR STABILITY DERIVATIVES ON THE LONGITUDINAL MOTIONS OF AN AIRCRAFT IN RESPONSE TO STEP CONTROL DEFLECTIONS AND TO THE INFLUENCE OF PROPORTIONAL AUTOMATIC CONTROL. Howard J. Curfman, Jr. 1955. ii, 21p. diagrs. (NACA Rept. 1241. Supersedes RM L50L11)

FROM LINEAR MECHANICS TO NONLINEAR MECHANICS. (De la mécanique lineaire a la mécanique non lineaire). Julien Loeb. October 1955. 18p. diagrs. (NACA TM 1396. Trans. from Annales des Telecommunications, v.5, no. 2, Feb., 1950, p. 65-71)

LABORATORY INVESTIGATION OF AN AUTOPILOT UTILIZING A MECHANICAL LINKAGE WITH A DEAD SPOT TO OBTAIN AN EFFECTIVE RATE SIGNAL. Ernest C. Seaberg. December 1955. 27p. diagrs., photos., tab. (NACA TN 3602. Supersedes RM L9F15a)

ANALYTICAL STUDY OF MODIFICATIONS TO THE AUTOPILOT OF A FIGHTER AIRPLANE IN ORDER TO REDUCE THE RESPONSE TO SIDE GUSTS. Charles W. Mathews and James J. Adams. March 1956. 35p. diagrs., tabs. (NACA TN 3635)

INITIAL RESULTS OF A FLIGHT INVESTIGATION OF A GUST-ALLEVIATION SYSTEM. Christopher C. Kraft, Jr. April 1956. 19p. diagrs., photos., tabs. (NACA TN 3612)

(1.8.3) SPINNING

FREE-SPINNING-TUNNEL INVESTIGATION OF GYROSCOPIC EFFECTS OF JET-ENGINE ROTATING PARTS (OR OF ROTATING PROPELLERS) ON SPIN AND SPIN RECOVERY. James S. Bowman, Jr. August 1955. 21p. diagrs., photo., 2 tabs., 6 charts. (NACA TN 3480)

PILOT'S LOSS OF ORIENTATION IN INVERTED SPINS. Stanley H. Scher. October 1955. 10p. diagrs., photos. (NACA TN 3531)

ANALYSIS OF A SPIN AND RECOVERY FROM TIME HISTORIES OF ATTITUDES AND VELOCITIES AS DETERMINED FOR A DYNAMIC MODEL OF A CONTEMPORARY FIGHTER AIRPLANE IN THE FREE-SPINNING TUNNEL. Stanley H. Scher. April 1956. 54p. diagrs., photos., tabs. (NACA TN 3611)

(1.8.4) STALLING

EFFECTS OF HIGH-LIFT AND STALL-CONTROL DEVICES, FUSELAGE, AND HORIZONTAL TAIL ON A WING SWEPT BACK 42° AT THE LEADING EDGE AND HAVING SYMMETRICAL CIRCULAR-ARC AIRFOIL SECTIONS AT A REYNOLDS NUMBER OF 6.9×10^6. Robert L. Woods and Stanley H. Spooner. April 20, 1949. 42p. diagrs., photos., tabs. (NACA RM L9B11)

TABULATED PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS MEASURED ON THE WING OF THE BELL X-1 AIRPLANE IN AN UNACCELERATED STALL AND IN PULL-UPS AT MACH NUMBERS OF 0.74, 0.75, 0.94, AND 0.97. Lawrence A. Smith. June 19, 1951. 49p. diagrs., photo., tabs. (NACA RM L51B23)

THE USE OF LEADING-EDGE AREA SUCTION TO INCREASE THE MAXIMUM LIFT COEFFICIENT OF A 35° SWEPT-BACK WING. Curt A. Holzhauser and Robert K. Martin. September 1952. 37p. diagrs., photo., 3 tabs. (NACA RM A52G17)

A FLIGHT INVESTIGATION OF THE EFFECT OF LEADING-EDGE CAMBER ON THE AERODYNAMIC CHARACTERISTICS OF A SWEPT-WING AIRPLANE. Seth B. Anderson, Frederick H. Matteson, and Rudolph D. Van Dyke, Jr. February 1953. 23p. diagrs., photos., tab. (NACA RM A52L16a)

PRELIMINARY RESULTS OF STABILITY AND CONTROL INVESTIGATION OF THE BELL X-5 RESEARCH AIRPLANE. Thomas W. Finch and Donald W. Briggs. February 1953. 35p. diagrs., photos., tabs. (NACA RM L52K18b)

WIND-TUNNEL INVESTIGATION OF STALL CONTROL BY SUCTION THROUGH A POROUS LEADING EDGE ON A 37° SWEPTBACK WING OF ASPECT RATIO 6 AT REYNOLDS NUMBERS FROM 2.50×10^6 to 8.10×10^6. Robert R. Graham and William A. Jacques. March 1953. 67p. diagrs., photo., 2 tabs. (NACA RM L52L05)

THE EFFECTS OF FENCES ON THE HIGH-SPEED LONGITUDINAL STABILITY OF A SWEPT-WING AIRPLANE. Richard S. Bray. August 1953. 37p. diagrs., photos., tabs. (NACA RM A53F23)

MEASUREMENT AND ANALYSIS OF WING AND TAIL BUFFETING LOADS ON A FIGHTER AIRPLANE. Wilber B. Huston and T. H. Skopinski. 1955. i, 27p. diagrs., photo., tabs. (NACA Rept. 1219. Supersedes TN 3080)

FLIGHT TESTS OF LEADING-EDGE AREA SUCTION ON A FIGHTER-TYPE AIRPLANE WITH A 35° SWEPTBACK WING. Richard S. Bray and Robert C. Innis. June 1955. 30p. diagrs., photos., tab. (NACA RM A55C07)

EFFECTS OF SWEEP ON THE MAXIMUM-LIFT CHARACTERISTICS OF FOUR ASPECT-RATIO-4 WINGS AT TRANSONIC SPEEDS. Thomas R. Turner. July 1955. 25p. diagrs. (NACA TN 3468. Formerly RM L50H11)

THE EFFECT OF REYNOLDS NUMBER ON THE STALLING CHARACTERISTICS AND PRESSURE DISTRIBUTIONS OF FOUR MODERATELY THIN AIRFOIL SECTIONS. George B. McCullough. November 1955. 24p. diagrs., tabs. (NACA TN 3524)

PRELIMINARY STUDY OF SOME FACTORS WHICH AFFECT THE STALL-FLUTTER CHARACTERISTICS OF THIN WINGS. A. Gerald Rainey. March 1956. 33p. diagrs., photo., tab. (NACA TN 3622. Supersedes RM L52D08)

INVESTIGATION OF LATERAL CONTROL NEAR THE STALL. FLIGHT TESTS WITH HIGH-WING AND LOW-WING MONOPLANES OF VARIOUS CONFIGURATIONS. Fred E. Weick and H. Norman Abramson, Agricultural and Mechanical College of Texas. June 1956. 34p. diagrs., photos., tabs. (NACA TN 3676)

INVESTIGATION OF LATERAL CONTROL NEAR THE STALL. ANALYSIS FOR REQUIRED LONGITUDINAL TRIM CHARACTERISTICS AND DISCUSSION OF DESIGN VARIABLES. Fred E. Weick and H. Norman Abramson, Agricultural and Mechanical College of Texas. June 1956. 91p. diagrs., tabs. (NACA TN 3677)

(1.8.5) FLYING QUALITIES

PRELIMINARY RESULTS OF NACA TRANSONIC FLIGHTS OF THE XS-1 AIRPLANE WITH 10-PERCENT-THICK WING AND 8-PERCENT-THICK HORIZONTAL TAIL. Hubert M. Drake, Harold R. Goodman, and Herbert H. Hoover. October 13, 1948. 18p. diagrs., photos. (NACA RM L8I29)

PRELIMINARY THEORETICAL AND FLIGHT INVESTIGATION OF THE LATERAL OSCILLATION OF THE X-1 AIRPLANE. Hubert M. Drake and Helen L. Wall. July 19, 1949. 24p. diagrs., photo., tab. (NACA RM L9F07)

AERODYNAMIC CHARACTERISTICS AND FLYING QUALITIES OF A TAILLESS TRIANGULAR-WING AIRPLANE CONFIGURATION AS OBTAINED FROM FLIGHTS OF ROCKET-PROPELLED MODELS AT TRANSONIC AND LOW SUPERSONIC SPEEDS. Grady L. Mitcham, Joseph E. Stevens, and Harry P. Norris. February 9, 1950. 67p. diagrs., photos., tabs. (NACA RM L9L07)

FLIGHT MEASUREMENTS OF THE STABILITY CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE IN SIDESLIPS AT 59° SWEEPBACK. Joan M. Childs. February 1953. 23p. diagrs., photos., tab. (NACA RM L52K13b)

PRELIMINARY RESULTS OF STABILITY AND CONTROL INVESTIGATION OF THE BELL X-5 RESEARCH AIRPLANE. Thomas W. Finch and Donald W. Briggs. February 1953. 35p. diagrs., photos., tabs. (NACA RM L52K18b)

FLIGHT DETERMINATION OF THE STATIC LONGITUDINAL STABILITY BOUNDARIES OF THE BELL X-5 RESEARCH AIRPLANE WITH 59° SWEEPBACK. Thomas W. Finch and Joseph A. Walker. February 1953. 51p. diagrs., photo., tab. (NACA RM L53A09b)

STUDIES OF THE SPEED STABILITY OF A TANDEM HELICOPTER IN FORWARD FLIGHT. Robert J. Tapscott and Kenneth B. Amer. August 1953. 35p. diagrs., photos., tab. (NACA RM L53F15a)

REVIEW AND INVESTIGATION OF UNSATISFACTORY CONTROL CHARACTERISTICS INVOLVING INSTABILITY OF PILOT-AIRPLANE COMBINATION AND METHODS FOR PREDICTING THESE DIFFICULTIES FROM GROUND TESTS. William H. Phillips, B. Porter Brown, and James T. Matthews, Jr. August 1953. 57p. diagrs., photos. (NACA RM L53F17a)

SOME DESIGN CONSIDERATIONS PERTINENT TO THE ROUGH-AIR BEHAVIOR OF AIRPLANES AT LOW ALTITUDE. Philip Donely and Clarence L. Gillis. November 1953. 21p. diagrs., tabs. (NACA RM L53J01b)

A STUDY OF THE PROBLEM OF DESIGNING AIRPLANES WITH SATISFACTORY INHERENT DAMPING OF THE DUTCH ROLL OSCILLATION. John P. Campbell and Marion O. McKinney, Jr. 1954. ii, 18p. diagrs., tabs. (NACA Rept. 1199. Supersedes TN 3035)

METHOD FOR STUDYING HELICOPTER LONGITUDINAL MANEUVER STABILITY. Kenneth B. Amer. 1954, ii, 17p. diagrs., photos., tabs. (NACA Rept. 1200. Supersedes TN 3022)

STUDIES OF THE LATERAL-DIRECTIONAL FLYING QUALITIES OF A TANDEM HELICOPTER IN FORWARD FLIGHT. Kenneth B. Amer and Robert J. Tapscott. 1954. ii, 15p. diagrs., photos., tab. (NACA Rept. 1207. Supersedes TN 2984)

FLIGHT TESTS OF A 0.4-SCALE MODEL OF A STAND-ON TYPE OF VERTICALLY RISING AIRCRAFT. Marion O. McKinney and Lysle P. Parlett. March 1954. 23p. diagrs., photos. (NACA RM L54B16b)

FLIGHT INVESTIGATION OF THE EFFECTS OF A PARTIAL-SPAN LEADING-EDGE CHORD EXTENSION OF THE AERODYNAMIC CHARACTERISTICS OF A 35° SWEPT-WING FIGHTER AIRPLANE. Frederick H. Matteson and Rudolph D. Van Dyke, Jr. April 1954. 34p. diagrs., photos., tabs. (NACA RM A54B26)

METHODS FOR OBTAINING DESIRED HELICOPTER STABILITY CHARACTERISTICS. F. B. Gustafson and Robert J. Tapscott. August 1954. 12p. tabs. (NACA RM L54F30)

METHODS OF PREDICTING HELICOPTER STABILITY. Robert J. Tapscott and F. B. Gustafson. November 1954. 15p. diagrs. (NACA RM L54G05)

CHARTS FOR ESTIMATING TAIL-ROTOR CONTRIBUTION TO HELICOPTER DIRECTIONAL STABILITY AND CONTROL IN LOW-SPEED FLIGHT. Kenneth B. Amer and Alfred Gessow. 1955. ii, 22p. diagrs., photo., tabs. (NACA Rept. 1216. Supersedes TN 3156)

FLIGHT DETERMINATION OF THE LONGITUDINAL STABILITY AND CONTROL CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 58.7° SWEEPBACK. Thomas W. Finch. May 1955. 30p. diagrs., photo., tab. (NACA RM H55C07)

A COMPARISON OF THE MEASURED AND PREDICTED LATERAL OSCILLATORY CHARACTERISTICS OF A 35° SWEPT-WING FIGHTER AIRPLANE. Walter E. McNeill and George E. Cooper. August 1955. 22p. diagrs., photo., 3 tabs. (NACA TN 3521. Formerly RM A51C28)

NOTE ON HOVERING TURNS WITH TANDEM HELICOPTERS. John P. Reeder and Robert J. Tapscott. September 1955. 5p. photo. (NACA RM L55G21)

HELICOPTER INSTRUMENT FLIGHT AND PRECISION MANEUVERS AS AFFECTED BY CHANGES IN DAMPING IN ROLL, PITCH, AND YAW. James B. Whitten, John P. Reeder, and Almer D. Crim. November 1955. 14p. diagrs., photos. (NACA TN 3537)

HOVERING-FLIGHT TESTS OF A MODEL OF A TRANSPORT VERTICAL-TAKE-OFF AIRPLANE WITH TILTING WING AND PROPELLERS. Powell M. Lovell, Jr., and Lysle P. Parlett. March 1956. 23p diagrs., photo., tab. (NACA TN 3630)

(1.8.6)
MASS AND GYROSCOPIC PROBLEMS

PRELIMINARY THEORETICAL AND FLIGHT INVESTIGATION OF THE LATERAL OSCILLATION OF THE X-1 AIRPLANE. Hubert M. Drake and Helen L. Wall. July 19, 1949. 24p. diagrs., photo., tab. (NACA RM L9F07)

A STUDY OF THE PROBLEM OF DESIGNING AIRPLANES WITH SATISFACTORY INHERENT DAMPING OF THE DUTCH ROLL OSCILLATION. John P. Campbell and Marion O. McKinney, Jr. 1954. ii, 18p. diagrs., tabs. (NACA Rept. 1199. Supersedes TN 3035)

FREE-SPINNING-TUNNEL INVESTIGATION OF GYROSCOPIC EFFECTS OF JET-ENGINE ROTATING PARTS (OR OF ROTATING PROPELLERS) ON SPIN AND SPIN RECOVERY. James S. Bowman, Jr. August 1955. 21p. diagrs., photo., 2 tabs., 6 charts. (NACA TN 3480)

FLIGHT MEASUREMENTS OF THE DYNAMIC LATERAL AND LONGITUDINAL STABILITY OF THE BELL X-5 RESEARCH AIRPLANE AT 58.7° SWEEPBACK. Edward N. Videan. October 1955. 68p. diagrs., photo., tabs. (NACA RM H55H10)

(1.8.8)
AUTOMATIC STABILIZATION

ROCKET-POWERED FLIGHT TEST OF A ROLL-STABILIZED SUPERSONIC MISSILE CONFIGURATION. Robert A. Gardiner and Jacob Zarovsky. January 12, 1950. 32p. diagrs., photos., tab. (NACA RM L9K01a)

FLIGHT INVESTIGATION OF A ROLL-STABILIZED MISSILE CONFIGURATION AT VARYING ANGLES OF ATTACK AT MACH NUMBERS BETWEEN 0.8 AND 1.79. Jacob Zarovsky and Robert A. Gardiner. March 6, 1951. 38p. diagrs., photos., tab. (NACA RM L50H21)

PRELIMINARY THEORETICAL INVESTIGATION OF SEVERAL METHODS FOR STABILIZING THE LATERAL MOTION OF A HIGH-SPEED FIGHTER AIRPLANE TOWED BY A SINGLE CABLE. Albert A. Schy and Carroll H. Woodling. March 1953. 46p. diagrs., 2 tabs. (NACA RM L52L24)

THEORETICAL INVESTIGATION OF SOME DISCONTINUOUS YAW DAMPERS. William H. Phillips and Helmut A. Kuehnel. April 1954. 39p. diagrs. (NACA RM L54B24a)

THEORETICAL AND ANALOG STUDIES OF THE EFFECTS OF NONLINEAR STABILITY DERIVATIVES ON THE LONGITUDINAL MOTIONS OF AN AIRCRAFT IN RESPONSE TO STEP CONTROL DEFLECTIONS AND TO THE INFLUENCE OF PROPORTIONAL AUTOMATIC CONTROL. Howard J. Curfman, Jr. 1955. ii, 21p. diagrs. (NACA Rept. 1241. Supersedes RM L50L11)

FROM LINEAR MECHANICS TO NONLINEAR MECHANICS. (De la mecanique lineaire a la mecanique non lineaire). Julien Loeb. October 1955. 18p. diagrs. (NACA TM 1396. Trans. from Annales des Telecommunications, v.5, no. 2, Feb., 1950, p. 65-71)

THEORETICAL STUDY OF THE LATERAL FREQUENCY RESPONSE TO GUSTS OF A FIGHTER AIRPLANE, BOTH WITH CONTROLS FIXED AND WITH SEVERAL TYPES OF AUTOPILOTS. James J. Adams and Charles W. Mathews. March 1956. 46p. diagrs., tabs. (NACA TN 3603)

HOVERING-FLIGHT TESTS OF A MODEL OF A TRANSPORT VERTICAL-TAKE-OFF AIRPLANE WITH TILTING WING AND PROPELLERS. Powell M. Lovell, Jr., and Lysle P. Parlett. March 1956. 23p diagrs., photo., tab. (NACA TN 3630)

ANALYTICAL STUDY OF MODIFICATIONS TO THE AUTOPILOT OF A FIGHTER AIRPLANE IN ORDER TO REDUCE THE RESPONSE TO SIDE GUSTS. Charles W. Mathews and James J. Adams. March 1956. 35p. diagrs., tabs. (NACA TN 3635)

ANALYSIS OF A VANE-CONTROLLED GUST-ALLEVIATION SYSTEM. Robert W. Boucher and Christopher C. Kraft, Jr. April 1956. 45p. diagrs., tabs. (NACA TN 3597)

FLIGHT INVESTIGATION OF THE EFFECTIVENESS OF AN AUTOMATIC AILERON TRIM CONTROL DEVICE FOR PERSONAL AIRPLANES. William H. Phillips, Helmut A. Kuehnel and James B. Whitten. April 1956. 42p. diagrs., photos., tab. (NACA TN 3637)

(1.9)
Aeroelasticity

ROLLING EFFECTIVENESS OF A THIN TAPERED WING HAVING PARTIAL-SPAN AILERONS AS DETERMINED BY ROCKET-POWERED TEST VEHICLES. Carl A. Sandahl and H. Kurt Strass. May 23, 1950. 12p. diagrs., photo. (NACA RM L50D17)

EXPERIMENTAL DETERMINATION OF EFFECT OF STRUCTURAL RIGIDITY ON ROLLING EFFECTIVENESS OF SOME STRAIGHT AND SWEPT WINGS AT MACH NUMBERS FROM 0.7 TO 1.7. H. Kurt Strass, E. M. Fields, and Paul E. Purser. October 4, 1950. 40p. diagrs., photo., tab. (NACA RM L50G14b)

SOME EFFECTS OF SPANWISE AILERON LOCATION AND WING STRUCTURAL RIGIDITY ON THE ROLLING EFFECTIVENESS OF 0.3-CHORD FLAP-TYPE AILERONS ON A TAPERED WING HAVING 63° SWEEPBACK AT THE LEADING EDGE AND NACA 64A005 AIRFOIL SECTIONS. H. Kurt Strass, E. M. Fields, and Eugene D. Schult. June 1951. 25p. diagrs., photo., tab. (NACA RM L51D18a)

RECENT EXPERIMENTAL FLUTTER STUDIES. Arthur A. Regier and Dennis J. Martin. June 12, 1951. 18p. diagrs. (NACA RM L51F11)

AN ANALYSIS OF THE EFFECTS OF AEROELASTICITY ON STATIC LONGITUDINAL STABILITY AND CONTROL OF A SWEPT-BACK-WING AIRPLANE. Richard B. Skoog. August 1951. 45p. diagrs. (NACA RM A51C19)

WIND-TUNNEL INVESTIGATION OF THE AERODYNAMIC CHARACTERISTICS IN PITCH OF WING-FUSELAGE COMBINATIONS AT HIGH SUBSONIC SPEEDS. ASPECT-RATIO SERIES. Richard E. Kuhn and James W. Wiggins. April 1952. 42p. diagrs., photos., tab. (NACA RM L52A29)

WIND-TUNNEL INVESTIGATION OF THE AERODYNAMIC CHARACTERISTICS IN PITCH OF WING-FUSELAGE COMBINATIONS AT HIGH-SUBSONIC SPEEDS. SWEEP SERIES. James W. Wiggins and Richard E. Kuhn. July 1952. 41p. diagrs., photos. (NACA RM L52D18)

RESULTS OF TWO EXPERIMENTS ON FLUTTER OF HIGH-ASPECT-RATIO SWEPT WINGS IN THE TRANSONIC SPEED RANGE. W. T. Lauten, Jr., and Burke R. O'Kelly. July 1952. 22p. diagrs., photos., tabs. (NACA RM L52D24b)

LONGITUDINAL STABILITY, TRIM, AND DRAG CHARACTERISTICS OF A ROCKET-PROPELLED MODEL OF AN AIRPLANE CONFIGURATION HAVING A 45° SWEPTBACK WING AND AN UNSWEPT HORIZONTAL TAIL. James H. Parks and Alan B. Kehlet. August 1952. 29p. diagrs., photos., tab. (NACA RM L52F05)

SOME EXPERIMENTAL STUDIES OF PANEL FLUTTER AT MACH NUMBER 1.3. Maurice A. Sylvester and John E. Baker. December 1952. 25p. diagrs., photos., tab. (NACA RM L52I16)

WIND-TUNNEL INVESTIGATION OF THE STATIC LATERAL STABILITY CHARACTERISTICS OF WING-FUSELAGE COMBINATIONS AT HIGH SUBSONIC SPEEDS. ASPECT-RATIO SERIES. Paul G. Fournier and Andrew L. Byrnes, Jr. February 1953. 26p. diagrs., photos. (NACA RM L52L18)

WIND-TUNNEL INVESTIGATION OF THE AERODYNAMIC CHARACTERISTICS IN PITCH OF WING-FUSELAGE COMBINATIONS AT HIGH SUBSONIC SPEEDS. TAPER-RATIO SERIES. Thomas J. King, Jr. and Thomas B. Pasteur, Jr. June 1953. 37p. diagrs., photos., tab. (NACA RM L53E20)

A COLLECTION OF DATA FOR ZERO-LIFT DAMPING IN ROLL OF WING-BODY COMBINATIONS AS DETERMINED WITH ROCKET-POWERED MODELS EQUIPPED WITH ROLL-TORQUE NOZZLES. David G. Stone. July 1953. 23p. diagrs., tab. (NACA RM L53E26)

SOME EFFECTS OF AEROELASTICITY AND SWEEPBACK ON THE ROLLING EFFECTIVENESS AND DRAG OF A 1/11-SCALE MODEL OF THE BELL X-5 AIRPLANE WING AT MACH NUMBERS FROM 0.6 TO 1.5. Roland D. English. November 1953. 21p. diagrs., photos. (NACA RM L53I18b)

EXPERIMENTAL INVESTIGATION OF THE OSCILLATING FORCES AND MOMENTS ON A TWO-DIMENSIONAL WING EQUIPPED WITH AN OSCILLATING CIRCULAR-ARC SPOILER. Sherman A. Clevenson and John E. Tomassoni. January 1954. 20p. diagrs., photos. (NACA RM L53K18)

COMPARISON BETWEEN THEORETICAL AND EXPERIMENTAL RATES OF ROLL OF TWO MODELS WITH FLEXIBLE RECTANGULAR WINGS AT SUPERSONIC SPEEDS. John M. Hedgepeth and Robert J. Kell. August 1954. 21p. diagrs., photo., tabs. (NACA RM L54F23)

THEORETICAL INVESTIGATION OF FLUTTER OF TWO-DIMENSIONAL FLAT PANELS WITH ONE SURFACE EXPOSED TO SUPERSONIC POTENTIAL FLOW. Herbert C. Nelson and Herbert J. Cunningham. July 1955. 60p. diagrs., tab. (NACA TN 3465)

SOME EFFECTS OF SYSTEM NONLINEARITIES IN THE PROBLEM OF AIRCRAFT FLUTTER. Donald S. Woolston, Harry L. Runyan, and Thomas A. Byrdsong. October 1955. 20p. diagrs., tabs. (NACA TN 3539)

SOME EFFECTS OF FUSELAGE FLEXIBILITY ON LONGITUDINAL STABILITY AND CONTROL. Bernard B. Klawans and Harold I. Johnson. April 1956. 42p. diagrs., tab. (NACA TN 3543)

ON PANEL FLUTTER AND DIVERGENCE OF INFINITELY LONG UNSTIFFENED AND RING-STIFFENED THIN-WALLED CIRCULAR CYLINDERS. Robert W. Leonard and John M. Hedgepeth. April 1956. 52p. diagrs. (NACA TN 3638)

EXPERIMENTAL MEASUREMENTS OF FORCES AND MOMENTS ON A TWO-DIMENSIONAL OSCILLATING WING AT SUBSONIC SPEEDS. Sherman A. Clevenson and Edward Widmayer, Jr. June 1956. 28p. diagrs., tab. (NACA TN 3686. Supersedes RM L9K28a)

(2)
HYDRODYNAMICS

(2.1) Theory

ESTIMATION OF WATER LANDING LOADS ON HYDRO-SKI-EQUIPPED AIRCRAFT. Emanuel Schnitzer. July 1953. 14p. diagrs. (NACA RM L53D29)

A THEORETICAL AND EXPERIMENTAL INVESTIGATION OF THE LIFT AND DRAG CHARACTERISTICS OF HYDROFOILS AT SUBCRITICAL AND SUPERCRITICAL SPEEDS. Kenneth L. Wadlin, Charles L. Shuford, Jr., and John R. McGehee. 1955. ii, 22p. diagrs., photos., tab. (NACA Rept. 1232. Supersedes RM L52D23a)

APPROXIMATE HYDRODYNAMIC DESIGN OF A FINITE SPAN HYDROFOIL. (Priblizhennyi gidrodinamicheskii raschet podvodnogo kryla konechnogo razmakha). A. N. Vladimirov. June 1955. 58p. diagrs., 5 tabs. (NACA TM 1341. Trans. from Central Aero-Hydrodynamical Institute, Rept. 311, 1937).

HYDRODYNAMIC PRESSURE DISTRIBUTIONS OBTAINED DURING A PLANING INVESTIGATION OF FIVE RELATED PRISMATIC SURFACES. Walter J. Kapryan and George M. Boyd, Jr. September 1955. 82p. diagrs., photos., 5 tabs. (NACA TN 3477)

HYDRODYNAMIC IMPACT LOADS IN SMOOTH WATER FOR A PRISMATIC FLOAT HAVING AN ANGLE OF DEAD RISE OF 10^{o}. Philip M. Edge, Jr. January 1956. 20p. diagrs., tab. (NACA TN 3608)

AN EXPERIMENTAL INVESTIGATION OF THE SCALE RELATIONS FOR THE IMPINGING WATER SPRAY GENERATED BY A PLANING SURFACE. Ellis E. McBride. February 1956. 42p. diagrs., photos., tab. (NACA TN 3615)

EFFECT OF CARRIAGE MASS UPON THE LOADS AND MOTIONS OF A PRISMATIC BODY DURING HYDRODYNAMIC IMPACT. Melvin F. Markey. March 1956. 45p. diagrs. (NACA TN 3619)

(2.2)
General Arrangement Studies

NACA MODEL INVESTIGATIONS OF SEAPLANES IN WAVES. John B. Parkinson. (Presented at Conference on Ships and Waves, Stevens Institute of Technology, Oct. 25-27, 1954) July 1955. 28p. diagrs., photos. (NACA TN 3419)

HYDRODYNAMIC PRESSURE DISTRIBUTIONS OBTAINED DURING A PLANING INVESTIGATION OF FIVE RELATED PRISMATIC SURFACES. Walter J. Kapryan and George M. Boyd, Jr. September 1955. 82p. diagrs., photos., 5 tabs. (NACA TN 3477)

AN EXPERIMENTAL INVESTIGATION OF THE SCALE RELATIONS FOR THE IMPINGING WATER SPRAY GENERATED BY A PLANING SURFACE. Ellis E. McBride. February 1956. 42p. diagrs., photos., tab. (NACA TN 3615)

EFFECT OF SHALLOW WATER ON THE HYDRODYNAMIC CHARACTERISTICS OF A FLAT-BOTTOM PLANING SURFACE. Kenneth W. Christopher. April 1956. 36p. diagrs., photos., tab. (NACA TN 3642)

(2.3)
Seaplane Hull Variables

PLANING CHARACTERISTICS OF THREE SURFACES REPRESENTATIVE OF HYDRO-SKI FORMS. Kenneth L. Wadlin and John R. McGehee. March 29, 1949. 94p. diagrs., photos., tab. (NACA RM L9C03)

(2.3.1)
LENGTH-BEAM RATIO

WATER LANDING INVESTIGATION OF A HYDRO-SKI MODEL AT BEAM LOADINGS OF 18.9 AND 4.4. Sidney A. Batterson. September 1951. 54p. diagrs., photos., tab. (NACA RM L51F27)

ESTIMATION OF WATER LANDING LOADS ON HYDRO-SKI-EQUIPPED AIRCRAFT. Emanuel Schnitzer. July 1953. 14p. diagrs. (NACA RM L53D29)

NACA MODEL INVESTIGATIONS OF SEAPLANES IN WAVES. John B. Parkinson. (Presented at Conference on Ships and Waves, Stevens Institute of Technology, Oct. 25-27, 1954) July 1955. 28p. diagrs., photos. (NACA TN 3419)

HYDRODYNAMIC PRESSURE DISTRIBUTIONS OBTAINED DURING A PLANING INVESTIGATION OF FIVE RELATED PRISMATIC SURFACES. Walter J. Kapryan and George M. Boyd, Jr. September 1955. 82p. diagrs., photos., 5 tabs. (NACA TN 3477)

EFFECT OF CARRIAGE MASS UPON THE LOADS AND MOTIONS OF A PRISMATIC BODY DURING HYDRODYNAMIC IMPACT. Melvin F. Markey. March 1956. 45p. diagrs. (NACA TN 3619)

EFFECT OF SHALLOW WATER ON THE HYDRODYNAMIC CHARACTERISTICS OF A FLAT-BOTTOM PLANING SURFACE. Kenneth W. Christopher. April 1956. 36p. diagrs., photos., tab. (NACA TN 3642)

(2.3.2)
DEAD RISE

PLANING CHARACTERISTICS OF THREE SURFACES REPRESENTATIVE OF HYDRO-SKI FORMS. Kenneth L. Wadlin and John R. McGehee. March 29, 1949. 94p. diagrs., photos., tab. (NACA RM L9C03)

WATER LANDING INVESTIGATION OF A HYDRO-SKI MODEL AT BEAM LOADINGS OF 18.9 AND 4.4. Sidney A. Batterson. September 1951. 54p. diagrs., photos., tab. (NACA RM L51F27)

ESTIMATION OF WATER LANDING LOADS ON HYDRO-SKI-EQUIPPED AIRCRAFT. Emanuel Schnitzer. July 1953. 14p. diagrs. (NACA RM L53D29)

NACA MODEL INVESTIGATIONS OF SEAPLANES IN WAVES. John B. Parkinson. (Presented at Conference on Ships and Waves, Stevens Institute of Technology, Oct. 25-27, 1954) July 1955. 28p. diagrs., photos. (NACA TN 3419)

HYDRODYNAMIC PRESSURE DISTRIBUTIONS OBTAINED DURING A PLANING INVESTIGATION OF FIVE RELATED PRISMATIC SURFACES. Walter J. Kapryan and George M. Boyd, Jr. September 1955. 82p. diagrs., photos., 5 tabs. (NACA TN 3477)

HYDRODYNAMIC IMPACT LOADS IN SMOOTH WATER FOR A PRISMATIC FLOAT HAVING AN ANGLE OF DEAD RISE OF 10^{0}. Philip M. Edge, Jr. January 1956. 20p. diagrs., tab. (NACA TN 3608)

EFFECT OF CARRIAGE MASS UPON THE LOADS AND MOTIONS OF A PRISMATIC BODY DURING HYDRODYNAMIC IMPACT. Melvin F. Markey. March 1956. 45p. diagrs. (NACA TN 3619)

(2.3.5)
FOREBODY SHAPE

NACA MODEL INVESTIGATIONS OF SEAPLANES IN WAVES. John B. Parkinson. (Presented at Conference on Ships and Waves, Stevens Institute of Technology, Oct. 25-27, 1954) July 1955. 28p. diagrs., photos. (NACA TN 3419)

HYDRODYNAMIC IMPACT LOADS IN SMOOTH WATER FOR A PRISMATIC FLOAT HAVING AN ANGLE OF DEAD RISE OF 10^{0}. Philip M. Edge, Jr. January 1956. 20p. diagrs., tab. (NACA TN 3608)

(2.3.6)
CHINES

HYDRODYNAMIC PRESSURE DISTRIBUTIONS OBTAINED DURING A PLANING INVESTIGATION OF FIVE RELATED PRISMATIC SURFACES. Walter J. Kapryan and George M. Boyd, Jr. September 1955. 82p. diagrs., photos., 5 tabs. (NACA TN 3477)

(2.6)
Planing Surfaces

PLANING CHARACTERISTICS OF THREE SURFACES REPRESENTATIVE OF HYDRO-SKI FORMS. Kenneth L. Wadlin and John R. McGehee. March 29, 1949. 94p. diagrs., photos., tab. (NACA RM L9C03)

WATER LANDING INVESTIGATION OF A HYDRO-SKI MODEL AT BEAM LOADINGS OF 18.9 AND 4.4. Sidney A. Batterson. September 1951. 54p. diagrs., photos., tab. (NACA RM L51F27)

AN INVESTIGATION OF A METHOD FOR OBTAINING HYDRODYNAMIC DATA AT VERY HIGH SPEEDS WITH A FREE WATER JET. Bernard Weinflash and John R. McGehee. June 1954. 28p. diagrs., photos., tabs. (NACA RM L54D23)

HYDRODYNAMIC PRESSURE DISTRIBUTIONS OBTAINED DURING A PLANING INVESTIGATION OF FIVE RELATED PRISMATIC SURFACES. Walter J. Kapryan and George M. Boyd, Jr. September 1955. 82p. diagrs., photos., 5 tabs. (NACA TN 3477)

AN EXPERIMENTAL INVESTIGATION OF THE SCALE RELATIONS FOR THE IMPINGING WATER SPRAY GENERATED BY A PLANING SURFACE. Ellis E. McBride. February 1956. 42p. diagrs., photos., tab. (NACA TN 3615)

EFFECT OF SHALLOW WATER ON THE HYDRODYNAMIC CHARACTERISTICS OF A FLAT-BOTTOM PLANING SURFACE. Kenneth W. Christopher. April 1956. 36p. diagrs., photos., tab. (NACA TN 3642)

PRELIMINARY INVESTIGATION OF SELF-EXCITED VIBRATIONS OF SINGLE PLANING SURFACES. Elmo J. Mottard. June 1956. 19p. diagrs., photos., tab. (NACA TN 3698. Supersedes RM L55J27)

(2.7)
Hydrofoils

EFFECTS OF A SWEPTBACK HYDROFOIL ON THE FORCE AND LONGITUDINAL STABILITY CHARACTERISTICS OF A TYPICAL HIGH-SPEED AIRPLANE. Raymond B. Wood. December 2, 1948. 19p. diagrs., photo., tabs. (NACA RM L8I30a)

ESTIMATION OF WATER LANDING LOADS ON HYDRO-SKI-EQUIPPED AIRCRAFT. Emanuel Schnitzer. July 1953. 14p. diagrs. (NACA RM L53D29)

A THEORETICAL AND EXPERIMENTAL INVESTIGATION OF THE LIFT AND DRAG CHARACTERISTICS OF HYDROFOILS AT SUBCRITICAL AND SUPERCRITICAL SPEEDS. Kenneth L. Wadlin, Charles L. Shuford, Jr., and John R. McGehee. 1955. ii, 22p. diagrs., photos., tab. (NACA Rept. 1232. Supersedes RM L52D23a)

APPROXIMATE HYDRODYNAMIC DESIGN OF A FINITE SPAN HYDROFOIL. (Priblizhennyi gidrodinamicheskii raschet podvodnogo kryla konechnogo razmakha). A. N. Vladimirov. June 1955. 58p. diagrs., 5 tabs. (NACA TM 1341. Trans. from Central Aero-Hydrodynamical Institute, Rept. 311, 1937).

EFFECT OF CARRIAGE MASS UPON THE LOADS AND MOTIONS OF A PRISMATIC BODY DURING HYDRODYNAMIC IMPACT. Melvin F. Markey. March 1956. 45p. diagrs. (NACA TN 3619)

(2.8)
Surface Craft

HYDRODYNAMIC IMPACT LOADS IN SMOOTH WATER FOR A PRISMATIC FLOAT HAVING AN ANGLE OF DEAD RISE OF 10^{0}. Philip M. Edge, Jr. January 1956. 20p. diagrs., tab. (NACA TN 3608)

(2.10)
Stability and Control

PRELIMINARY INVESTIGATION OF SELF-EXCITED VIBRATIONS OF SINGLE PLANING SURFACES. Elmo J. Mottard. June 1956. 19p. diagrs., photos., tab. (NACA TN 3698. Supersedes RM L55J27)

(3)
PROPULSION

(3)
PROPULSION

SUMMARY EVALUATION OF TOOTHED-NOZZLE ATTACHMENTS AS A JET-NOISE-SUPPRESSION DEVICE. Warren J. North. July 1955. 19p. diagrs., photo. (NACA TN 3516)

EFFECT OF EXHAUST-NOZZLE EJECTORS ON TURBOJET NOISE GENERATION. Warren J. North and Willard D. Coles. October 1955. 26p. diagrs., photo. (NACA TN 3573)

EFFECT OF CLIMB TECHNIQUE ON JET-TRANSPORT NOISE. Warren J. North. January 1956. 19p. diagrs. (NACA TN 3582)

(3.1)
Complete Systems

EXPERIMENTAL INVESTIGATION OF THRUST AUGMENTATION OF 4000-POUND-THRUST CENTRIFUGAL-FLOW-TYPE TURBOJET ENGINE BY BLEEDOFF. William L. Jones and Louis J. Bogdan. July 3, 1950. 30p. diagrs., photo. (NACA RM E50D17)

(3.1.1)
RECIPROCATING ENGINES

METEOROLOGICAL PROBLEMS ASSOCIATED WITH COMMERCIAL TUBOJET-AIRCRAFT OPERATION. A working group of the NACA Subcommittee on Meteorological Problems. June 1955. 46p. (NACA RM 54L29)

FULL-SCALE PERFORMANCE STUDY OF A PROTOTYPE CRASH-FIRE PROTECTION SYSTEM FOR RECIPROCATING-ENGINE-POWERED AIRPLANES. Dugald O. Black and Jacob C. Moser. November 1955. 36p. diagrs., photos. (NACA RM E55B11)

(3.1.3)
TURBOJET ENGINES

EXPERIMENTAL INVESTIGATION OF THRUST AUGMENTATION OF 4000-POUND-THRUST AXIAL-FLOW-TYPE TURBOJET ENGINE BY INTERSTAGE INJECTION OF WATER-ALCOHOL MIXTURES IN COMPRESSOR. John H. Povolny, James W. Useller, and Louis J. Chelko. April 6, 1950. 42p. diagrs., photos., tab. (NACA RM E9K30)

EXPERIMENTAL INVESTIGATION OF THRUST AUGMENTATION OF 4000-POUND-THRUST CENTRIFUGAL-FLOW-TYPE TURBOJET ENGINE BY BLEEDOFF. William L. Jones and Louis J. Bogdan. July 3, 1950. 30p. diagrs., photo. (NACA RM E50D17)

PERFORMANCE OF 4600-POUND-THRUST CENTRIFUGAL-FLOW-TYPE TURBOJET ENGINE WITH WATER-ALCOHOL INJECTION AT INLET. Philip W. Glasser. October 9, 1950. 24p. diagrs. (NACA RM E50H07)

EFFECT OF SPARK REPETITION RATE ON THE IGNITION LIMITS OF A SINGLE TUBULAR COMBUSTOR. Hampton H. Foster. December 1951. 12p. diagrs., tab. (NACA RM E51J18)

COMPARISON OF LOCKED-ROTOR AND WINDMILLING DRAG CHARACTERISTICS OF AN AXIAL-FLOW-COMPRESSOR TYPE TURBOJET ENGINE. K. R. Vincent, S. C. Huntley, and H. D. Wilsted. January 1952. 10p. diagrs. (NACA RM E51K15)

ANALYSIS OF COOLANT-FLOW REQUIREMENTS FOR AN IMPROVED, INTERNAL-STRUT-SUPPORTED, AIR-COOLED TURBINE-ROTOR BLADE. Wilson B. Schramm and Alfred J. Nachtigall. February 1952. 26p. diagrs., photo. (NACA RM E51L13)

EXPERIMENTAL INVESTIGATION OF AIR-COOLED TURBINE BLADES IN TURBOJET ENGINE. XI - INTERNAL-STRUT-SUPPORTED ROTOR BLADE. Reeves P. Cochran, Francis S. Stepka, and Morton H. Krasner. June 1952. 45p. diagrs., photos., tabs. (NACA RM E52C21)

PRELIMINARY INVESTIGATION OF FLOW FLUCTUATIONS DURING SURGE AND BLADE ROW STALL IN AXIAL-FLOW COMPRESSORS. Merle C. Huppert. August 1952. 52p. diagrs., photos. (NACA RM E52E28)

TECHNIQUES FOR DETERMINING THRUST IN FLIGHT FOR AIRPLANES EQUIPPED WITH AFTERBURNERS. L. Stewart Rolls, C. Dewey Havill, and George R. Holden. January 1953. 27p. diagrs., photos. (NACA RM A52K12)

PRELIMINARY INVESTIGATION IN J33 TURBOJET ENGINE OF SEVERAL ROOT DESIGNS FOR CERAMAL TURBINE BLADES. George C. Deutsch, Andre J. Meyer, Jr. and William C. Morgan. January 1953. 24p. diagrs., photos., 2 tabs. (NACA RM E52K13)

COMPARATIVE TENSILE STRENGTHS AT 1200° F OF VARIOUS ROOT DESIGNS FOR CERMET TURBINE BLADES. Andre J. Meyer, Jr., Albert Kaufman, and Howard F. Calvert. June 1953. 23p. diagrs., photos., tabs. (NACA RM E53C25)

ANALYTICAL EVALUATION OF EFFECT OF EQUIVALENCE RATIO, INLET-AIR TEMPERATURE, AND COMBUSTION PRESSURE ON PERFORMANCE OF SEVERAL POSSIBLE RAM-JET FUELS. Leonard K. Tower and Benson E. Gammon. September 1953. 59p. diagrs., tabs. (NACA RM E53G14)

PRELIMINARY INVESTIGATION OF THE FLOW IN AN ANNULAR-DIFFUSER—TAILPIPE COMBINATION WITH AN ABRUPT AREA EXPANSION AND SUCTION, INJECTION, AND VORTEX-GENERATOR FLOW CONTROLS. John R. Henry and Stafford W. Wilbur. February 1954. 27p. diagrs. (NACA RM L53K30)

CARBON DEPOSITION OBTAINED WITH MIL-F-5624A FUELS IN A SINGLE COMBUSTOR AND IN THREE FULL-SCALE ENGINES. Jerrold D. Wear. June 1954. 20p. diagrs., photo., tabs. (NACA RM E53D15)

ANALOG STUDY OF INTERACTING AND NON-INTERACTING MULTIPLE-LOOP CONTROL SYSTEMS FOR TURBULENT ENGINES. George J. Pack and W. E. Phillips, Jr. 1955. ii, 13p. diagrs. (NACA Rept. 1212. Supersedes TN 3112)

METEOROLOGICAL PROBLEMS ASSOCIATED WITH COMMERCIAL TUBOJET-AIRCRAFT OPERATION. A working group of the NACA Subcommittee on Meteorological Problems. June 1955. 46p. (NACA RM 54L29)

EFFECT OF SOME SELECTED HEAT TREATMENTS ON THE OPERATING LIFE OF CAST HS-21 TURBINE BLADES. Francis J. Clauss, Floyd B. Garrett and John W. Weeton. July 1955. 39p. diagrs., photos. (NACA TN 3512)

SUMMARY EVALUATION OF TOOTHED-NOZZLE ATTACHMENTS AS A JET-NOISE-SUPPRESSION DEVICE. Warren J. North. July 1955. 19p. diagrs., photo. (NACA TN 3516)

APPROXIMATE METHOD FOR DETERMINING EQUILIBRIUM OPERATION OF COMPRESSOR COMPONENT OF TURBOJET ENGINE. Merle C. Huppert. July 1955. 25p. diagrs. (NACA TN 3517)

OPTIMUM FLIGHT PATHS OF TURBOJET AIRCRAFT. (Traiettorie Ottime Di Volo Degli Aeroplani Azionati Da Turboreattori). Angelo Miele. September 1955. 47p. diagrs., tabs. (NACA TM 1389. Trans. from L'Aerotecnica, v. 32, no. 4, 1952, p. 206-219)

EFFECT OF EXHAUST-NOZZLE EJECTORS ON TURBOJET NOISE GENERATION. Warren J. North and Willard D. Coles. October 1955. 26p. diagrs., photo. (NACA TN 3573)

A SURVEY OF UNCLASSIFIED AXIAL-FLOW-COMPRESSOR LITERATURE. Howard Z. Herzig and Arthur G. Hansen. November 1955. i, 88p. (NACA RM E55H11)

EFFECT OF CLIMB TECHNIQUE ON JET-TRANSPORT NOISE. Warren J. North. January 1956. 19p. diagrs. (NACA TN 3582)

PERFORMANCE AND OPERATIONAL STUDIES OF A FULL-SCALE JET-ENGINE THRUST REVERSER. Robert C. Kohl. April 1956. 38p. diagrs., photo. (NACA TN 3665)

A SONIC-FLOW ORIFICE PROBE FOR THE IN-FLIGHT MEASUREMENT OF TEMPERATURE PROFILES OF A JET ENGINE EXHAUST WITH AFTERBURNING. C. Dewey Havill and L. Stewart Rolls. May 1956. 18p. diagrs., photos. (NACA TN 3714)

SOME LINEAR DYNAMICS OF TWO-SPOOL TURBOJET ENGINES. David Novik. June 1956. 35p. diagrs. (NACA TN 3274)

(3.1.4)
TURBO-PROPELLER ENGINES

ALTITUDE INVESTIGATION OF PERFORMANCE OF TURBINE-PROPELLER ENGINE AND ITS COMPONENTS. Lewis E. Wallner and Martin J. Saari. October 5, 1950. 65p. diagrs., photos. (NACA RM E50H30)

DYNAMIC INVESTIGATION OF TURBINE-PROPELLER ENGINE UNDER ALTITUDE CONDITIONS. Richard P. Krebs, Seymour C. Himmel, Darnold Blivas, and Harold Shames. December 6, 1950. 55p diagrs., photo. (NACA RM E50J24)

EVALUATION OF A SILICONE-DIESTER LUBRICANT IN BENCH STUDIES AND IN A TURBOPROPELLER ENGINE. Robert L. Johnson. S. F. Murray, and Edmond E. Bisson. Appendix D: COPY OF REPORT BY SILICONE PRODUCTS DEPARTMENT OF GENERAL ELECTRIC ON NACA SD-17 FLUID. N. G. Holdstock, General Electric Company. May 1954. 32p. diagrs., photos., tabs. (NACA RM E54B05)

NOISE SURVEY OF A 10-FOOT FOUR-BLADE TURBINE-DRIVEN PROPELLER UNDER STATIC CONDITIONS. Max C. Kurbjun. July 1955. 25p. diagrs., photo. (NACA TN 3422)

EFFECT OF SOME SELECTED HEAT TREATMENTS ON THE OPERATING LIFE OF CAST HS-21 TURBINE BLADES. Francis J. Clauss, Floyd B. Garrett and John W. Weeton. July 1955. 39p. diagrs., photos. (NACA TN 3512)

PERFORMANCE ANALYSIS OF FIXED- AND FREE-TURBINE HELICOPTER ENGINES. Richard P. Krebs and William S. Miller, Jr. June 1956. 49p. diagrs. (NACA TN 3654)

(3.1.6)
PULSE-JET ENGINES

INVESTIGATION OF A PULSE-JET-POWERED HELICOPTER ROTOR ON THE LANGLEY HELICOPTER TEST TOWER. Edward J. Radin and Paul J. Carpenter. February 1954. 23p. diagrs., photos. (NACA RM L53L15)

INVESTIGATION OF THE PROPULSIVE CHARACTERISTICS OF A HELICOPTER-TYPE PULSE-JET ENGINE OVER A RANGE OF MACH NUMBERS AND ANGLE OF YAW. Paul J. Carpenter, James P. Shivers, and Edwin E. Lee, Jr. January 1956. 24p. diagrs., photos. (NACA TN 3625)

(3.1.7)
RAM-JET ENGINES

PERFORMANCE OF A 20-INCH STEADY-FLOW RAM JET AT HIGH ALTITUDES AND RAM-PRESSURE RATIOS. Eugene Perchonok, William H. Sterbentz, and Fred A. Wilcox. June 25, 1947. 39p. diagrs., photos. (NACA RM E6L06)

FLIGHT INVESTIGATION OF A 20-INCH-DIAMETER STEADY-FLOW RAM JET. John H. Disher. January 14, 1948. 29p. diagrs., photo. (NACA RM E7I05a)

SOME EFFECTS OF GUTTER FLAME-HOLDER DIMENSIONS ON COMBUSTION-CHAMBER PERFORMANCE OF 20-INCH RAM JET. Fred A. Wilcox, Eugene Perchonok, and George Wishnek. July 30, 1948. 39p. diagrs., photos., tab. (NACA RM E8C22)

EFFECT OF THREE FLAME-HOLDER CONFIGURATIONS ON SUBSONIC FLIGHT PERFORMANCE OF RECTANGULAR RAM JET OVER RANGE OF ALTITUDES. Dugald O. Black and Wesley E. Messing. November 24, 1948. 28p. diagrs., photo., tab. (NACA RM E8I01)

EFFECT OF VARIATION IN FUEL PRESSURE ON COMBUSTION PERFORMANCE OF RECTANGULAR RAM JET. Wesley E. Messing and Dugald O. Black. November 24, 1948. 26p. diagrs., photo., tab. (NACA RM E8I28)

DESIGN FACTORS FOR 4- BY 8-INCH RAM-JET COMBUSTOR. Donald W. Male and Adolph J. Cervenka. August 11, 1949. 47p. diagrs., photos. (NACA RM E9F09)

INVESTIGATION OF INTERNAL REGENERATIVE FUEL-HEATING SYSTEM FOR 20-INCH RAM JET. Sol Baker and Eugene Perchonok. September 1, 1949. 22p. diagrs., photos. (NACA RM E9F20)

FREE-FLIGHT PERFORMANCE OF 16-INCH-DIAMETER SUPERSONIC RAM-JET UNITS. I - FOUR UNITS DESIGNED FOR COMBUSTION-CHAMBER-INLET MACH NUMBER OF 0.12 AT FREE-STREAM MACH NUMBER OF 1.6 (UNITS A-2, A-3, A-4, AND A-5). William W. Carlton and Wesley E. Messing. September 22, 1949. 51p. diagrs., photos. (NACA RM E9F22)

ANALYSIS AND EXPERIMENTAL OBSERVATION OF PRESSURE LOSSES IN RAM-JET COMBUSTION CHAMBERS. William H. Sterbentz. November 4, 1949. 22p. diagrs. (NACA RM E9H19)

INITIAL FLIGHT INVESTIGATION OF A TWIN-ENGINE SUPERSONIC RAM JET. Maxime A. Faget and H. Rudolph Dettwyler. September 15, 1950. 28p. diagrs., photos. (NACA RM L50H10)

FREE-JET PERFORMANCE OF 16-INCH RAM-JET ENGINE WITH SEVERAL FUELS. Fred A. Wilcox. October 31, 1950. 23p. diagrs., photos. (NACA RM E50I06)

FREE-JET TESTS OF A 6.5-INCH-DIAMETER RAM-JET ENGINE AT MACH NUMBERS OF 1.81 AND 2.00. Maxime A. Faget, Raymond S. Watson, and Walter A. Bartlett, Jr. March 7, 1951. 38p. diagrs., photos. (NACA RM L50L06)

PRELIMINARY EVALUATION OF THE AIR AND FUEL SPECIFIC-IMPULSE CHARACTERISTICS OF SEVERAL POTENTIAL RAM-JET FUELS. I - OCTENE-1, ALUMINUM, AND ALUMINUM - OCTENE-1 SLURRIES. Benson E. Gammon. April 30, 1951. 20p. diagrs. (NACA RM E51C12)

PRELIMINARY EVALUATION OF THE AIR AND FUEL SPECIFIC-IMPULSE CHARACTERISTICS OF SEVERAL POTENTIAL RAM-JET FUELS. II - MAGNESIUM AND MAGNESIUM - OCTENE-1 SLURRIES. Benson E. Gammon. May 2, 1951. 15p. diagrs. (NACA RM E51C23)

PRELIMINARY INVESTIGATION OF HELMHOLTZ RESONATORS FOR DAMPING PRESSURE FLUCTUATIONS IN 3.6-INCH RAM JET AT MACH NUMBER 1.90. Jerome L. Fox. May 22, 1951. 24p. diagrs., photos. (NACA RM E51C05)

PRELIMINARY EVALUATION OF THE AIR AND FUEL SPECIFIC-IMPULSE CHARACTERISTICS OF SEVERAL POTENTIAL RAM-JET FUELS. III - DIBORANE, PENTABORANE, BORON, AND BORON-OCTENE-1 SLURRIES. Benson E. Gammon. July 1951. 26p. diagrs. (NACA RM E51D25)

PRELIMINARY EVALUATION OF THE AIR AND FUEL SPECIFIC-IMPULSE CHARACTERISTICS OF SEVERAL POTENTIAL RAM-JET FUELS. IV - HYDROGEN, α-METHYLNAPHTHALENE, AND CARBON. Benson E. Gammon. August 1951. 22p. diagrs. (NACA RM E51F05)

ANALYTICAL INVESTIGATION OF RAM-JET ENGINE PERFORMANCE IN FLIGHT MACH NUMBER RANGE FROM 3 TO 7. Philip J. Evans, Jr. October 1951. 29p. diagrs. (NACA RM E51H02)

FREE-JET TESTS OF A 1.1-INCH-DIAMETER SUPERSONIC RAM-JET ENGINE. Joseph H. Judd and Otto F. Trout, Jr. March 1952. 24p. diagrs., photos., tabs. (NACA RM L51L18)

EFFECT OF FUEL-AIR DISTRIBUTION ON PERFORMANCE OF A 16-INCH RAM-JET ENGINE. A. J. Cervenka and E. E. Dangle. June 1952. 25p. diagrs., photos., tab. (NACA RM E52D08)

FLIGHT MEASUREMENTS AT MACH NUMBERS FROM 1.1 TO 1.9 OF THE ZERO-LIFT DRAG OF A TWIN-ENGINE SUPERSONIC RAM-JET CONFIGURATION. Abraham Leiss. June 1952. 16p. diagrs., photos. (NACA RM L52D24)

COMBUSTION EFFICIENCY OF HOMOGENEOUS FUEL-AIR MIXTURES IN A 5-INCH RAM-JET-TYPE COMBUSTOR. Thaine W. Reynolds and Robert D. Ingebo. November 1952. 36p. diagrs., tabs. (NACA RM E52I23)

SUMMARY REPORT ON ANALYTICAL EVALUATION OF AIR AND FUEL SPECIFIC-IMPULSE CHARACTERISTICS OF SEVERAL NONHYDROCARBON JET-ENGINE FUELS. Roland Breitwieser, Sanford Gordon and Benson Gammon. February 1953. 58p. diagrs., tab. (NACA RM E52L08)

EFFECT OF FUELS ON COMBUSTION EFFICIENCY OF 5-INCH RAM-JET-TYPE COMBUSTION. Thaine W. Reynolds. May 1953. 40p. diagrs., tabs. (NACA RM E53C20)

ANALYTICAL EVALUATION OF EFFECT OF EQUIVALENCE RATIO, INLET-AIR TEMPERATURE, AND COMBUSTION PRESSURE ON PERFORMANCE OF SEVERAL POSSIBLE RAM-JET FUELS. Leonard K. Tower and Benson E. Gammon. September 1953. 59p. diagrs., tabs. (NACA RM E53G14)

THEORETICAL AND EXPERIMENTAL INVESTIGATION OF ADDITIVE DRAG. Merwin Sibulkin. 1954. ii, 12p. diagrs. (NACA Rept. 1187. Formerly RM E51B13)

ACOUSTIC ANALYSIS OF RAM-JET BUZZ. Harold Mirels. November 1955. 33p diagrs. (NACA TN 3574)

EVAPORATION OF JP-5 FUEL SPRAYS IN AIR STREAMS. Hampton H. Foster and Robert D. Ingebo. February 1956. 26p. diagrs., tabs. (NACA RM E55K02)

EFFECT OF TRANSVERSE BODY FORCE ON CHANNEL FLOW WITH SMALL HEAT ADDITION. Simon Ostrach and Franklin K. Moore. February 1956. 31p. diagrs. (NACA TN 3594)

(3.1.8)
ROCKET ENGINES

THEORETICAL PERFORMANCE OF SOME ROCKET PROPELLANTS CONTAINING HYDROGEN, NITROGEN, AND OXYGEN. Riley O. Miller and Paul M. Ordin. May 26, 1948. 53p. diagrs., tabs. (NACA RM E8A30)

STARTING OF ROCKET ENGINE AT CONDITIONS OF SIMULATED ALTITUDE USING CRUDE MONOETHYLANILINE AND OTHER FUELS WITH MIXED ACID. Dezso J. Ladanyi, John L. Sloop, Jack C. Humphrey, and Gerald Morrell. July 19, 1950. 64p. diagrs., photos., tabs. (NACA RM E50D20)

ORTHOTOLUIDINE AND TRIETHYLAMINE IN ROCKET ENGINE APPLICATIONS. Dezso J. Ladanyi. January 1953. 24p. diagrs., tabs. (NACA RM E52K19)

COMPARISON OF IGNITION DELAYS OF SEVERAL PROPELLANT COMBINATIONS OBTAINED WITH MODIFIED OPEN-CUP AND SMALL-SCALE ROCKET ENGINE APPARATUS. Dezso J. Ladanyi and Riley O. Miller. June 1953. 20p. diagrs., photos., tabs. (NACA RM E53D03)

THEORETICAL PERFORMANCE OF JP-4 FUEL AND LIQUID OXYGEN AS A ROCKET PROPELLANT. I - FROZEN COMPOSITION. Vearl N. Huff and Anthony Fortini. April 1956. 35p. diagrs., tabs. (NACA RM E56A27)

(3.1.9)
JET-DRIVEN ROTORS

INVESTIGATION OF A PULSE-JET-POWERED HELICOPTER ROTOR ON THE LANGLEY HELICOPTER TEST TOWER. Edward J. Radin and Paul J. Carpenter. February 1954. 23p. diagrs., photos. (NACA RM L53L15)

LAMINAR FREE CONVECTION ON A VERTICAL PLATE WITH PRESCRIBED NONUNIFORM WALL HEAT FLUX OR PRESCRIBED NONUNIFORM WALL TEMPERATURE. E. M. Sparrow. July 1955. 34p. diagrs. (NACA TN 3508)

EFFECT OF TRANSVERSE BODY FORCE ON CHANNEL FLOW WITH SMALL HEAT ADDITION. Simon Ostrach and Franklin K. Moore. February 1956. 31p. diagrs. (NACA TN 3594)

(3.1.10)
NUCLEAR-ENERGY SYSTEMS

VISUAL STUDY OF FREE CONVECTION IN A NARROW VERTICAL ENCLOSURE. Ephraim M. Sparrow and Samuel J. Kaufman. February 1956. 14p. diagr., photos. (NACA RM E55L14a)

SELF SHIELDING IN RECTANGULAR AND CYLINDRICAL GEOMETRIES. Harold Schneider, Paul G. Saper, and Charles F. Kadow. April 1956. 40p. diagrs., tabs. (NACA TN 3661)

(3.2)
Control of Engines

SUMMARY OF SCALE-MODEL THRUST-REVERSER INVESTIGATION. John H. Povolny, Fred W. Steffen, and Jack G. McArdle. February 1956. 49p. diagrs., photos. (NACA TN 3664)

(3.2.2)
CONTROL OF TURBOJET ENGINES

COMPARISON OF LOCKED-ROTOR AND WINDMILLING DRAG CHARACTERISTICS OF AN AXIAL-FLOW-COMPRESSOR TYPE TURBOJET ENGINE. K. R. Vincent, S. C. Huntley, and H. D. Wilsted. January 1952. 10p. diagrs. (NACA RM E51K15)

ANALOG STUDY OF INTERACTING AND NON-INTERACTING MULTIPLE-LOOP CONTROL SYSTEMS FOR TURBULENT ENGINES. George J. Pack and W. E. Phillips, Jr. 1955. ii, 13p. diagrs. (NACA Rept. 1212. Supersedes TN 3112)

SOME LINEAR DYNAMICS OF TWO-SPOOL TURBOJET ENGINES. David Novik. June 1956. 35p. diagrs. (NACA TN 3274)

(3.2.4)
CONTROL OF TURBINE-PROPELLER ENGINES

DYNAMIC INVESTIGATION OF TURBINE-PROPELLER ENGINE UNDER ALTITUDE CONDITIONS. Richard P. Krebs, Seymour C. Himmel, Darnold Blivas, and Harold Shames. December 6, 1950. 55p diagrs., photo. (NACA RM E50J24)

(3.3)
Auxiliary Booster Systems

EXPERIMENTAL INVESTIGATION OF THRUST AUGMENTATION OF 4000-POUND-THRUST CENTRIFUGAL-FLOW-TYPE TURBOJET ENGINE BY BLEEDOFF. William L. Jones and Louis J. Bogdan. July 3, 1950. 30p. diagrs., photo. (NACA RM E50D17)

(3.3.2)
GAS TURBINES

(3. 3. 2. 1)
LIQUID INJECTION

EXPERIMENTAL INVESTIGATION OF THRUST AUGMENTATION OF 4000-POUND-THRUST AXIAL-FLOW-TYPE TURBOJET ENGINE BY INTERSTAGE INJECTION OF WATER-ALCOHOL MIXTURES IN COMPRESSOR. John H. Povolny, James W. Useller, and Louis J. Chelko. April 6, 1950. 42p. diagrs., photos., tab. (NACA RM E9K30)

EXPERIMENTAL INVESTIGATION OF THRUST AUGMENTATION OF 4000-POUND-THRUST CENTRIFUGAL-FLOW-TYPE TURBOJET ENGINE BY BLEEDOFF. William L. Jones and Louis J. Bogdan. July 3, 1950. 30p. diagrs., photo. (NACA RM E50D17)

PERFORMANCE OF 4600-POUND-THRUST CENTRIFUGAL-FLOW-TYPE TURBOJET ENGINE WITH WATER-ALCOHOL INJECTION AT INLET. Philip W. Glasser. October 9, 1950. 24p. diagrs. (NACA RM E50H07)

(3. 3. 2. 2)
AFTERBURNING

IDEAL TEMPERATURE RISE DUE TO CONSTANT-PRESSURE COMBUSTION OF A JP-4 FUEL. S(idney) C. Huntley. September 1955. 53p. diagrs., tabs. (NACA RM E55G27a)

(3. 3. 2. 3)
BLEEDOFF

PERFORMANCE INVESTIGATION OF CAN-TYPE COMBUSTOR. II - WATER INJECTION AT VARIOUS STATIONS IN COMBUSTOR. William P. Cook and Eugene V. Zettle. September 30, 1948. 27p. diagrs. (NACA RM E8F28)

EXPERIMENTAL INVESTIGATION OF THRUST AUGMENTATION OF 4000-POUND-THRUST CENTRIFUGAL-FLOW-TYPE TURBOJET ENGINE BY BLEEDOFF. William L. Jones and Louis J. Bogdan. July 3, 1950. 30p. diagrs., photo. (NACA RM E50D17)

(3.4) Fuels

LOW-TEMPERATURE IGNITION-DELAY CHARACTERISTICS OF SEVERAL ROCKET FUELS WITH MIXED ACID IN MODIFIED OPEN-CUP-TYPE APPARATUS. Riley O. Miller. October 17, 1950. 23p. diagrs., photos., tabs. (NACA RM E50H16)

CONSIDERATIONS IN THE ADAPTATION OF LOW-COST FUELS TO GAS-TURBINE-POWERED COMMERCIAL AIRCRAFT. Henry C. Barnett and Richard J. McCafferty. October 1953. 59p. diagrs., photo., 2 tabs. (NACA RM E53H05)

CHEMICAL ACTION OF HALOGENATED AGENTS IN FIRE EXTINGUISHING. Frank E. Belles. September 1955. 28p. diagrs., 3 tabs. (NACA TN 3565)

(3.4.1) PREPARATION

SOME FUNDAMENTAL ASPECTS OF NITRIC ACID OXIDANTS FOR ROCKET APPLICATIONS. Dezso J. Ladanyi, Riley O. Miller, Wolf Karo, and Charles E. Feiler. January 1953. ii, 95p. diagrs., tabs. (NACA RM E52J01)

EXPERIMENTAL AND CALCULATED TEMPERATURE AND MASS HISTORIES OF VAPORIZING FUEL DROPS. M. M. El Wakil, R. J. Priem, H. J. Brikowski, P. S. Myers, and O. A. Uyehara, Wisconsin University. January 1956. 82p. diagrs., photos., tab. (NACA TN 3490)

EVAPORATION OF JP-5 FUEL SPRAYS IN AIR STREAMS. Hampton H. Foster and Robert D. Ingebo. February 1956. 26p. diagrs., tabs. (NACA RM E55K02)

(3.4.2) PHYSICAL AND CHEMICAL PROPERTIES

THEORETICAL PERFORMANCE OF SOME ROCKET PROPELLANTS CONTAINING HYDROGEN, NITROGEN, AND OXYGEN. Riley O. Miller and Paul M. Ordin. May 26, 1948. 53p. diagrs., tabs. (NACA RM E8A30)

LOW-TEMPERATURE IGNITION-DELAY CHARACTERISTICS OF SEVERAL ROCKET FUELS WITH MIXED ACID IN MODIFIED OPEN-CUP-TYPE APPARATUS. Riley O. Miller. October 17, 1950. 23p. diagrs., photos., tabs. (NACA RM E50H16)

IGNITION-DELAY CHARACTERISTICS IN MODIFIED OPEN-CUP APPARATUS OF SEVERAL FUELS WITH NITRIC ACID OXIDANTS WITHIN TEMPERATURE RANGE 70° TO -105° F. Riley O. Miller. December 1951. 30p. diagrs., 4 tabs. (NACA RM E51J11)

EFFECT OF SPARK REPETITION RATE ON THE IGNITION LIMITS OF A SINGLE TUBULAR COMBUSTOR. Hampton H. Foster. December 1951. 12p. diagrs., tab. (NACA RM E51J18)

IGNITION DELAY EXPERIMENTS WITH SMALL-SCALE ROCKET ENGINE AT SIMULATED ALTITUDE CONDITIONS USING VARIOUS FUELS WITH NITRIC ACID OXIDANTS. Dezso J. Ladanyi. January 1952. 44p. diagrs., photos., tabs. (NACA RM E51J01)

SOME FUNDAMENTAL ASPECTS OF NITRIC ACID OXIDANTS FOR ROCKET APPLICATIONS. Dezso J. Ladanyi, Riley O. Miller, Wolf Karo, and Charles E. Feiler. January 1953. ii, 95p. diagrs., tabs. (NACA RM E52J01)

ORTHOTOLUIDINE AND TRIETHYLAMINE IN ROCKET ENGINE APPLICATIONS. Dezso J. Ladanyi. January 1953. 24p. diagrs., tabs. (NACA RM E52K19)

COMPARISON OF IGNITION DELAYS OF SEVERAL PROPELLANT COMBINATIONS OBTAINED WITH MODIFIED OPEN-CUP AND SMALL-SCALE ROCKET ENGINE APPARATUS. Dezso J. Ladanyi and Riley O. Miller. June 1953. 20p. diagrs., photos., tabs. (NACA RM E53D03)

EFFECTS OF NITROGEN TETROXIDE AND WATER CONCENTRATION ON FREEZING POINT AND IGNITION DELAY OF FUMING NITRIC ACID. Riley O. Miller. September 1953. 32p. diagrs., tabs. (NACA RM E53G31)

CONSIDERATIONS IN THE ADAPTATION OF LOW-COST FUELS TO GAS-TURBINE-POWERED COMMERCIAL AIRCRAFT. Henry C. Barnett and Richard J. McCafferty. October 1953. 59p. diagrs., photo., 2 tabs. (NACA RM E53H05)

INVESTIGATION OF EFFECT OF FLUORIDE ON CORROSION OF 2S-0 ALUMINUM AND 347 STAINLESS STEEL IN FUMING NITRIC ACID AT 170° F. Charles E. Feiler and Gerald Morrell. February 1954. 22p. diagrs., photos., tabs. (NACA RM E53L17b)

CARBON DEPOSITION OBTAINED WITH MIL-F-5624A FUELS IN A SINGLE COMBUSTOR AND IN THREE FULL-SCALE ENGINES. Jerrold D. Wear. June 1954. 20p. diagrs., photo., tabs. (NACA RM E53D15)

AN AUTOMATIC VISCOMETER FOR NON-NEWTONIAN MATERIALS. Ruth N. Weltmann and Perry W. Kuhns. August 1955. 34p. diagrs., photos., tab. (NACA TN 3510)

AVERAGE BOND ENERGIES BETWEEN BORON AND ELEMENTS OF THE FOURTH, FIFTH, SIXTH, AND SEVENTH GROUPS OF THE PERIODIC TABLE. Aubrey P. Altshuller. November 1955. 7p. tab. (NACA RM E55I27a)

EFFECT OF DISSOLVED OXYGEN ON THE FILTERABILITY OF JET FUELS FOR TEMPERATURES BETWEEN 300° AND 400° F. Anderson B. McKeown and Robert R. Hibbard. December 1955. 22p. diagrs., photos., tabs. (NACA RM E55I28)

EXPERIMENTAL AND CALCULATED TEMPERATURE AND MASS HISTORIES OF VAPORIZING FUEL DROPS. M. M. El Wakil, R. J. Priem, H. J. Brikowski, P. S. Myers, and O. A. Uyehara, Wisconsin University. January 1956. 82p. diagrs., photos., tab. (NACA TN 3490)

THEORETICAL PERFORMANCE OF JP-4 FUEL AND LIQUID OXYGEN AS A ROCKET PROPELLANT. I - FROZEN COMPOSITION. Vearl N. Huff and Anthony Fortini. April 1956. 35p. diagrs., tabs. (NACA RM E56A27)

VAPOR-PHASE OXIDATION AND SPONTANEOUS IGNITION - CORRELATION AND EFFECT OF VARIABLES. Donald E. Swarts and Milton Orchin, University of Cincinnati. April 1956. 32p. diagrs., tabs. (NACA TN 3579)

PRELIMINARY EVALUATION OF THE AIR AND FUEL SPECIFIC-IMPULSE CHARACTERISTICS OF SEVERAL POTENTIAL RAM-JET FUELS. I - OCTENE-1, ALUMINUM, AND ALUMINUM - OCTENE-1 SLURRIES. Benson E. Gammon. April 30, 1951. 20p. diagrs. (NACA RM E51C12)

PRELIMINARY EVALUATION OF THE AIR AND FUEL SPECIFIC-IMPULSE CHARACTERISTICS OF SEVERAL POTENTIAL RAM-JET FUELS. II - MAGNESIUM AND MAGNESIUM - OCTENE-1 SLURRIES. Benson E. Gammon. May 2, 1951. 15p. diagrs. (NACA RM E51C23)

(3.4.3) RELATION TO ENGINE PERFORMANCE

PRELIMINARY EVALUATION OF THE AIR AND FUEL SPECIFIC-IMPULSE CHARACTERISTICS OF SEVERAL POTENTIAL RAM-JET FUELS. III - DIBORANE, PENTABORANE, BORON, AND BORON-OCTENE-1 SLURRIES. Benson E. Gammon. July 1951. 26p. diagrs. (NACA RM E51D25)

PRELIMINARY EVALUATION OF THE AIR AND FUEL SPECIFIC-IMPULSE CHARACTERISTICS OF SEVERAL POTENTIAL RAM-JET FUELS. IV - HYDROGEN, α-METHYLNAPHTHALENE, AND CARBON. Benson E. Gammon. August 1951. 22p. diagrs. (NACA RM E51F05)

EFFECT OF SPARK REPETITION RATE ON THE IGNITION LIMITS OF A SINGLE TUBULAR COMBUSTOR. Hampton H. Foster. December 1951. 12p. diagrs., tab. (NACA RM E51J18)

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(3.4.3.2) TURBINE ENGINES, RAM JETS, AND PULSE JETS

FREE-JET PERFORMANCE OF 16-INCH RAM-JET ENGINE WITH SEVERAL FUELS. Fred A. Wilcox. October 31, 1950. 23p. diagrs., photos. (NACA RM E50I06)

FLAME VELOCITIES OF FOUR ALKYLSILANES. Melvin Gerstein, Edgar L. Wong, and Oscar Levine. March 9, 1951. 14p. diagrs., tab. (NACA RM E51A08)

PRELIMINARY EVALUATION OF THE AIR AND FUEL SPECIFIC-IMPULSE CHARACTERISTICS OF SEVERAL POTENTIAL RAM-JET FUELS. I - OCTENE-1, ALUMINUM, AND ALUMINUM - OCTENE-1 SLURRIES. Benson E. Gammon. April 30, 1951. 20p. diagrs. (NACA RM E51C12)

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EFFECT OF SPARK REPETITION RATE ON THE IGNITION LIMITS OF A SINGLE TUBULAR COMBUSTOR. Hampton H. Foster. December 1951. 12p. diagrs., tab. (NACA RM E51J18)

EFFECT OF INLET-AIR AND FUEL PARAMETERS ON SMOKING CHARACTERISTICS OF A SINGLE TUBULAR TURBOJET-ENGINE COMBUSTOR. Helmut F. Butze. April 1952. 26p. diagrs., photos., tabs. (NACA RM E52A18)

EFFECT OF OXYGEN CONCENTRATION OF THE INLET OXYGEN-NITROGEN MIXTURE ON THE COMBUSTION EFFICIENCY OF A SINGLE J33 TURBOJET COMBUSTOR. Charles C. Graves. August 1952. 45p. diagrs., 2 tabs. (NACA RM E52F13)

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EFFECT OF INLET OXYGEN CONCENTRATION ON COMBUSTION EFFICIENCY OF J33 SINGLE COMBUSTOR OPERATING WITH GASEOUS PROPANE. Charles C. Graves. March 1953. 22p. diagrs., tab. (NACA RM E53A27)

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EVAPORATION OF JP-5 FUEL SPRAYS IN AIR STREAMS. Hampton H. Foster and Robert D. Ingebo. February 1956. 26p. diagrs., tabs. (NACA RM E55K02)

(3.4.3.3) ROCKETS (INCLUDES FUEL AND OXIDANT)

THEORETICAL PERFORMANCE OF SOME ROCKET PROPELLANTS CONTAINING HYDROGEN, NITROGEN, AND OXYGEN. Riley O. Miller and Paul M. Ordin. May 26, 1948. 53p. diagrs., tabs. (NACA RM E8A30)

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INVESTIGATION OF EFFECTS OF ADDITIVES ON STORAGE PROPERTIES OF FUMING NITRIC ACIDS. Charles E. Feiler and Gerald Morrell. December 1952. 25p. photos., diagrs., tabs. (NACA RM E52J16)

SOME FUNDAMENTAL ASPECTS OF NITRIC ACID OXIDANTS FOR ROCKET APPLICATIONS. Dezso J. Ladanyi, Riley O. Miller, Wolf Karo, and Charles E. Feiler. January 1953. ii, 95p. diagrs., tabs. (NACA RM E52J01)

ORTHOTOLUIDINE AND TRIETHYLAMINE IN ROCKET ENGINE APPLICATIONS. Dezso J. Ladanyi. January 1953. 24p. diagrs., tabs. (NACA RM E52K19)

COMPARISON OF IGNITION DELAYS OF SEVERAL PROPELLANT COMBINATIONS OBTAINED WITH MODIFIED OPEN-CUP AND SMALL-SCALE ROCKET ENGINE APPARATUS. Dezso J. Ladanyi and Riley O. Miller. June 1953. 20p. diagrs., photos., tabs. (NACA RM E53D03)

EFFECTS OF NITROGEN TETROXIDE AND WATER CONCENTRATION ON FREEZING POINT AND IGNITION DELAY OF FUMING NITRIC ACID. Riley O. Miller. September 1953. 32p. diagrs., tabs. (NACA RM E53G31)

INVESTIGATION OF EFFECT OF FLUORIDE ON CORROSION OF 2S-0 ALUMINUM AND 347 STAINLESS STEEL IN FUMING NITRIC ACID AT 170° F. Charles E. Feiler and Gerald Morrell. February 1954. 22p. diagrs., photos., tabs. (NACA RM E53L17b)

FLAME PROPAGATION LIMITS OF PROPANE AND n-PENTANE IN OXIDES OF NITROGEN. Riley O. Miller. August 1955. 29p. diagrs., 3 tabs. (NACA TN 3520)

EXPERIMENTAL AND CALCULATED TEMPERATURE AND MASS HISTORIES OF VAPORIZING FUEL DROPS. M. M. El Wakil, R. J. Priem, H. J. Brikowski, P. S. Myers, and O. A. Uyehara, Wisconsin University. January 1956. 82p. diagrs., photos., tab (NACA TN 3490)

THEORETICAL PERFORMANCE OF JP-4 FUEL AND LIQUID OXYGEN AS A ROCKET PROPELLANT. I - FROZEN COMPOSITION. Vearl N. Huff and Anthony Fortini. April 1956. 35p. diagrs., tabs. (NACA RM E56A27)

(3.5)
Combustion and Combustors

AN INVESTIGATION OF HIGH-FREQUENCY COMBUSTION OSCILLATIONS IN LIQUID-PROPELLANT ROCKET ENGINES. Adelbert O. Tischler, Rudolph V. Massa and Raymond L. Mantler. June 1953. 37p. diagrs., photos. (NACA RM E53B27)

A POLAR-COORDINATE SURVEY METHOD FOR DETERMINING JET-ENGINE COMBUSTION-CHAMBER PERFORMANCE. Robert Friedman and Edward R. Carlson. September 1955. 29p. diagrs., photo., tab. (NACA TN 3566)

STUDY OF SCREECHING COMBUSTION IN A 6-INCH SIMULATED AFTERBURNER. Perry L. Blackshear, Warren D. Rayle, and Leonard K. Tower. October 1955. 58p. diagrs., photos., tab. (NACA TN 3567)

DISCHARGE COEFFICIENTS FOR COMBUSTOR-LINER AIR-ENTRY HOLES. I - CIRCULAR HOLES WITH PARALLEL FLOW. Ralph T. Dittrich and Charles C. Graves. April 1956. 39p. diagrs. (NACA TN 3663)

STABILITY OF SYSTEMS CONTAINING A HEAT SOURCE - THE RAYLEIGH CRITERION. Boa-Teh Chu, Johns Hopkins University. June 1956. 25p. diagrs. (NACA RM 56D27)

(3.5.1)
GENERAL COMBUSTION RESEARCH

PERFORMANCE OF A RAM-JET-TYPE COMBUSTOR WITH FLAME HOLDERS IMMERSED IN THE COMBUSTION ZONE. Roland Breitwieser. November 1, 1948. 47p. diagrs., photos. (NACA RM E8F21)

FLAME VELOCITIES OF FOUR ALKYLSILANES. Melvin Gerstein, Edgar L. Wong, and Oscar Levine. March 9, 1951. 14p. diagrs., tab. (NACA RM E51A08)

PRELIMINARY EVALUATION OF THE AIR AND FUEL SPECIFIC-IMPULSE CHARACTERISTICS OF SEVERAL POTENTIAL RAM-JET FUELS. I - OCTENE-1, ALUMINUM, AND ALUMINUM - OCTENE-1 SLURRIES. Benson E. Gammon. April 30, 1951. 20p. diagrs. (NACA RM E51C12)

PRELIMINARY EVALUATION OF THE AIR AND FUEL SPECIFIC-IMPULSE CHARACTERISTICS OF SEVERAL POTENTIAL RAM-JET FUELS. II - MAGNESIUM AND MAGNESIUM - OCTENE-1 SLURRIES. Benson E. Gammon. May 2, 1951. 15p. diagrs. (NACA RM E51C23)

PRELIMINARY EVALUATION OF THE AIR AND FUEL SPECIFIC-IMPULSE CHARACTERISTICS OF SEVERAL POTENTIAL RAM-JET FUELS. III - DIBORANE, PENTABORANE, BORON, AND BORON-OCTENE-1 SLURRIES. Benson E. Gammon. July 1951. 26p. diagrs. (NACA RM E51D25)

PRELIMINARY EVALUATION OF THE AIR AND FUEL SPECIFIC-IMPULSE CHARACTERISTICS OF SEVERAL POTENTIAL RAM-JET FUELS. IV - HYDROGEN, α-METHYLNAPHTHALENE, AND CARBON. Benson E. Gammon. August 1951. 22p. diagrs. (NACA RM E51F05)

IGNITION-DELAY CHARACTERISTICS IN MODIFIED OPEN-CUP APPARATUS OF SEVERAL FUELS WITH NITRIC ACID OXIDANTS WITHIN TEMPERATURE RANGE 70° TO -105° F. Riley O. Miller. December 1951. 30p. diagrs., 4 tabs. (NACA RM E51J11)

EFFECT OF SPARK REPETITION RATE ON THE IGNITION LIMITS OF A SINGLE TUBULAR COMBUSTOR. Hampton H. Foster. December 1951. 12p. diagrs., tab. (NACA RM E51J18)

EFFECT OF INLET-AIR AND FUEL PARAMETERS ON SMOKING CHARACTERISTICS OF A SINGLE TUBULAR TURBOJET-ENGINE COMBUSTOR. Helmut F. Butze. April 1952. 26p. diagrs., photos., tabs. (NACA RM E52A18)

EFFECT OF OXYGEN CONCENTRATION OF THE INLET OXYGEN-NITROGEN MIXTURE ON THE COMBUSTION EFFICIENCY OF A SINGLE J33 TURBOJET COMBUSTOR. Charles C. Graves. August 1952. 45p. diagrs., 2 tabs. (NACA RM E52F13)

SUMMARY REPORT ON ANALYTICAL EVALUATION OF AIR AND FUEL SPECIFIC-IMPULSE CHARACTERISTICS OF SEVERAL NONHYDROCARBON JET-ENGINE FUELS. Roland Breitwieser, Sanford Gordon and Benson Gammon. February 1953. 58p. diagrs., tab. (NACA RM E52L08)

EFFECT OF INLET OXYGEN CONCENTRATION ON COMBUSTION EFFICIENCY OF J33 SINGLE COMBUSTOR OPERATING WITH GASEOUS PROPANE. Charles C. Graves. March 1953. 22p. diagrs., tab. (NACA RM E53A27)

AN INVESTIGATION OF HIGH-FREQUENCY COMBUSTION OSCILLATIONS IN LIQUID-PROPELLANT ROCKET ENGINES. Adelbert O. Tischler, Rudolph V. Massa and Raymond L. Mantler. June 1953. 37p. diagrs., photos. (NACA RM E53B27)

EFFECTS OF NITROGEN TETROXIDE AND WATER CONCENTRATION ON FREEZING POINT AND IGNITION DELAY OF FUMING NITRIC ACID. Riley O. Miller. September 1953. 32p. diagrs., tabs. (NACA RM E53G31)

PROPAGATION OF A FREE FLAME IN A TURBULENT GAS STREAM. William R. Mickelsen and Norman E. Ernstein. July 1955. 89p. diagrs., photos., 2 tabs. (NACA TN 3456)

IDEAL TEMPERATURE RISE DUE TO CONSTANT-PRESSURE COMBUSTION OF A JP-4 FUEL. S(idney) C. Huntley. September 1955. 53p. diagrs., tabs. (NACA RM E55G27a)

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AN EXPERIMENTAL COMPARISON OF THE LAGRANGIAN AND EULERIAN CORRELATION COEFFICIENTS IN HOMOGENEOUS ISOTROPIC TURBULENCE. William R. Mickelsen. October 1955. 42p. diagrs. (NACA TN 3570)

STABILITY OF SYSTEMS CONTAINING A HEAT SOURCE - THE RAYLEIGH CRITERION. Boa-Teh Chu, Johns Hopkins University. June 1956. 25p. diagrs. (NACA RM 56D27)

SPACE HEATING RATES FOR SOME PREMIXED TURBULENT PROPANE-AIR FLAMES. Burton D. Fine and Paul Wagner. June 1956. 26p. diagrs., tab. (NACA TN 3277)

(3. 5. 1. 1) LAMINAR-FLOW COMBUSTION

CHEMICAL ACTION OF HALOGENATED AGENTS IN FIRE EXTINGUISHING. Frank E. Belles. September 1955. 28p. diagrs., 3 tabs. (NACA TN 3565)

BURNING VELOCITIES OF VARIOUS PREMIXED TURBULENT PROPANE FLAMES ON OPEN BURNERS. Paul Wagner. October 1955. 32p. diagrs., photos., tab. (NACA TN 3575)

(3. 5. 1. 2) TURBULENT-FLOW COMBUSTION

COMBUSTION EFFICIENCY OF HOMOGENEOUS FUEL-AIR MIXTURES IN A 5-INCH RAM-JET-TYPE COMBUSTOR. Thaine W. Reynolds and Robert D. Ingebo. November 1952. 36p. diagrs., tabs. (NACA RM E52I23)

EFFECT OF FUELS ON COMBUSTION EFFICIENCY OF 5-INCH RAM-JET-TYPE COMBUSTION. Thaine W. Reynolds. May 1953. 40p. diagrs., tabs. (NACA RM E53C20)

PROPAGATION OF A FREE FLAME IN A TURBULENT GAS STREAM. William R. Mickelsen and Norman E. Ernstein. July 1955. 89p. diagrs., photos., 2 tabs. (NACA TN 3456)

BURNING VELOCITIES OF VARIOUS PREMIXED TURBULENT PROPANE FLAMES ON OPEN BURNERS. Paul Wagner. October 1955. 32p. diagrs., photos., tab. (NACA TN 3575)

STABILITY OF SYSTEMS CONTAINING A HEAT SOURCE - THE RAYLEIGH CRITERION. Boa-Teh Chu, Johns Hopkins University. June 1956. 25p. diagrs. (NACA RM 56D27)

SPACE HEATING RATES FOR SOME PREMIXED TURBULENT PROPANE-AIR FLAMES. Burton D. Fine and Paul Wagner. June 1956. 26p. diagrs., tab. (NACA TN 3277)

(3. 5. 1. 4) EFFECTS OF FUEL ATOMIZATION

EXPERIMENTAL AND CALCULATED TEMPERATURE AND MASS HISTORIES OF VAPORIZING FUEL DROPS. M. M. El Wakil, R. J. Priem, H. J. Brikowski, P. S. Myers, and O. A. Uyehara, Wisconsin University. January 1956. 82p. diagrs., photos., tab. (NACA TN 3490)

(3. 5. 1. 5) REACTION MECHANISMS

EFFECT OF OXYGEN CONCENTRATION OF THE INLET OXYGEN-NITROGEN MIXTURE ON THE COMBUSTION EFFICIENCY OF A SINGLE J33 TURBOJET COMBUSTOR. Charles C. Graves. August 1952. 45p. diagrs., 2 tabs. (NACA RM E52F13)

EFFECT OF INLET OXYGEN CONCENTRATION ON COMBUSTION EFFICIENCY OF J33 SINGLE COMBUSTOR OPERATING WITH GASEOUS PROPANE. Charles C. Graves. March 1953. 22p. diagrs., tab. (NACA RM E53A27)

EFFECT OF HYDROCARBON STRUCTURE ON REACTION PROCESSES LEADING TO SPONTANEOUS IGNITION. Donald E. Swarts and Charles E. Frank, University of Cincinnati. July 1955. 23p. diagrs., 6 tabs. (NACA TN 3384)

VAPOR-PHASE OXIDATION AND SPONTANEOUS IGNITION - CORRELATION AND EFFECT OF VARIABLES. Donald E. Swarts and Milton Orchin, University of Cincinnati. April 1956. 32p. diagrs., tabs. (NACA TN 3579)

(3. 5. 1. 6)
IGNITION OF GASES

FLAME PROPAGATION LIMITS OF PROPANE AND n-PENTANE IN OXIDES OF NITROGEN. Riley O. Miller. August 1955. 29p. diagrs., 3 tabs. (NACA TN 3520)

CHEMICAL ACTION OF HALOGENATED AGENTS IN FIRE EXTINGUISHING. Frank E. Belles. September 1955. 28p. diagrs., 3 tabs. (NACA TN 3565)

SPARK IGNITION OF FLOWING GASES. V - APPLICATION OF FUEL-AIR-RATIO AND INITIAL-TEMPERATURE DATA TO IGNITION THEORY. Clyde C. Swett, Jr. November 1955. 19p. diagrs. (NACA RM E55I16)

VAPOR-PHASE OXIDATION AND SPONTANEOUS IGNITION - CORRELATION AND EFFECT OF VARIABLES. Donald E. Swarts and Milton Orchin, University of Cincinnati. April 1956. 32p. diagrs., tabs. (NACA TN 3579)

(3.5.2)
EFFECT OF ENGINE OPERATING CONDITIONS AND COMBUSTION CHAMBER GEOMETRY

PERFORMANCE OF A 20-INCH STEADY-FLOW RAM JET AT HIGH ALTITUDES AND RAM-PRESSURE RATIOS. Eugene Perchonok, William H. Sterbentz, and Fred A. Wilcox. June 25, 1947. 39p. diagrs., photos. (NACA RM E6L06)

SOME EFFECTS OF GUTTER FLAME-HOLDER DIMENSIONS ON COMBUSTION-CHAMBER PERFORMANCE OF 20-INCH RAM JET. Fred A. Wilcox, Eugene Perchonok, and George Wishnek. July 30, 1948. 39p. diagrs., photos., tab. (NACA RM E8C22)

INVESTIGATION OF INTERNAL REGENERATIVE FUEL-HEATING SYSTEM FOR 20-INCH RAM JET. Sol Baker and Eugene Perchonok. September 1, 1949. 22p. diagrs., photos. (NACA RM E9F20)

EFFECT OF INLET-AIR AND FUEL PARAMETERS ON SMOKING CHARACTERISTICS OF A SINGLE TUBULAR TURBOJET-ENGINE COMBUSTOR. Helmut F. Butze. April 1952. 26p. diagrs., photos., tabs. (NACA RM E52A18)

EFFECT OF OXYGEN CONCENTRATION OF THE INLET OXYGEN-NITROGEN MIXTURE ON THE COMBUSTION EFFICIENCY OF A SINGLE J33 TURBOJET COMBUSTOR. Charles C. Graves. August 1952. 45p. diagrs., 2 tabs. (NACA RM E52F13)

EFFECT OF INLET OXYGEN CONCENTRATION ON COMBUSTION EFFICIENCY OF J33 SINGLE COMBUSTOR OPERATING WITH GASEOUS PROPANE. Charles C. Graves. March 1953. 22p. diagrs., tab. (NACA RM E53A27)

AN INVESTIGATION OF HIGH-FREQUENCY COMBUSTION OSCILLATIONS IN LIQUID-PROPELLANT ROCKET ENGINES. Adelbert O. Tischler, Rudolph V. Massa and Raymond L. Mantler. June 1953. 37p. diagrs., photos. (NACA RM E53B27)

ANALYTICAL EVALUATION OF EFFECT OF EQUIVALENCE RATIO, INLET-AIR TEMPERATURE, AND COMBUSTION PRESSURE ON PERFORMANCE OF SEVERAL POSSIBLE RAM-JET FUELS. Leonard K. Tower and Benson E. Gammon. September 1953. 59p. diagrs., tabs. (NACA RM E53G14)

INVESTIGATION OF A PULSE-JET-POWERED HELICOPTER ROTOR ON THE LANGLEY HELICOPTER TEST TOWER. Edward J. Radin and Paul J. Carpenter. February 1954. 23p. diagrs., photos. (NACA RM L53L15)

AN EXPERIMENTAL COMPARISON OF THE LAGRANGIAN AND EULERIAN CORRELATION COEFFICIENTS IN HOMOGENEOUS ISOTROPIC TURBULENCE. William R. Mickelsen. October 1955. 42p. diagrs. (NACA TN 3570)

INVESTIGATION OF THE PROPULSIVE CHARACTERISTICS OF A HELICOPTER-TYPE PULSE-JET ENGINE OVER A RANGE OF MACH NUMBERS AND ANGLE OF YAW. Paul J. Carpenter, James P. Shivers, and Edwin E. Lee, Jr. January 1956. 24p. diagrs., photos. (NACA TN 3625)

(3. 5. 2. 2)
TURBINE ENGINES

PERFORMANCE INVESTIGATION OF CAN-TYPE COMBUSTOR. II - WATER INJECTION AT VARIOUS STATIONS IN COMBUSTOR. William P. Cook and Eugene V. Zettle. September 30, 1948. 27p. diagrs. (NACA RM E8F28)

PRELIMINARY CORRELATION OF EFFICIENCY OF AIRCRAFT GAS-TURBINE COMBUSTORS FOR DIFFERENT OPERATING CONDITIONS. J. Howard Childs. September 21, 1950. 40p. diagrs., tab. (NACA RM E50F15)

EFFECT OF SPARK REPETITION RATE ON THE IGNITION LIMITS OF A SINGLE TUBULAR COMBUSTOR. Hampton H. Foster. December 1951. 12p. diagrs., tab. (NACA RM E51J18)

EFFECT OF INLET-AIR AND FUEL PARAMETERS ON SMOKING CHARACTERISTICS OF A SINGLE TUBULAR TURBOJET-ENGINE COMBUSTOR. Helmut F. Butze. April 1952. 26p. diagrs., photos., tabs. (NACA RM E52A18)

ANALYTICAL EVALUATION OF EFFECT OF EQUIVALENCE RATIO, INLET-AIR TEMPERATURE, AND COMBUSTION PRESSURE ON PERFORMANCE OF SEVERAL POSSIBLE RAM-JET FUELS. Leonard K. Tower and Benson E. Gammon. September 1953. 59p. diagrs., tabs. (NACA RM E53G14)

RELATION OF TURBINE-ENGINE COMBUSTION EFFICIENCY TO SECOND-ORDER REACTION KINETICS AND FUNDAMENTAL FLAME SPEED. J. Howard Childs and Charles C. Graves. August 1954. 37p. diagrs. (NACA RM E54G23)

IDEAL TEMPERATURE RISE DUE TO CONSTANT-PRESSURE COMBUSTION OF A JP-4 FUEL. S(idney) C. Huntley. September 1955. 53p. diagrs., tabs. (NACA RM E55G27a)

A POLAR-COORDINATE SURVEY METHOD FOR DETERMINING JET-ENGINE COMBUSTION-CHAMBER PERFORMANCE. Robert Friedman and Edward R. Carlson. September 1955. 29p. diagrs., photo., tab. (NACA TN 3566)

(3.5.2.3) RAM-JET ENGINES

FLIGHT INVESTIGATION OF A 20-INCH-DIAMETER STEADY-FLOW RAM JET. John H. Disher. January 14, 1948. 29p. diagrs., photo. (NACA RM E7I05a)

INVESTIGATION OF EFFECTS OF MOVABLE EXHAUST-NOZZLE PLUG ON OPERATIONAL PERFORMANCE OF 20-INCH RAM JET. William H. Sterbentz and Fred A. Wilcox. July 27, 1948. 32p. diagrs., photos. (NACA RM E8D22)

SOME EFFECTS OF GUTTER FLAME-HOLDER DIMENSIONS ON COMBUSTION-CHAMBER PERFORMANCE OF 20-INCH RAM JET. Fred A. Wilcox, Eugene Perchonok, and George Wishnek. July 30, 1948. 39p. diagrs., photos., tab. (NACA RM E8C22)

PRELIMINARY INVESTIGATION OF EFFECTS OF COMBUSTION IN RAM JET ON PERFORMANCE OF SUPERSONIC DIFFUSERS. I - SHOCK DIFFUSER WITH TRIPLE-SHOCK PROJECTING CONE. J. F. Connors and A. H. Schroeder. September 15, 1948. 18p. diagrs. (NACA RM E8F15)

PRELIMINARY INVESTIGATION OF EFFECTS OF COMBUSTION IN RAM JET ON PERFORMANCE OF SUPERSONIC DIFFUSERS. II - PERFORATED SUPERSONIC INLET. Albert H. Schroeder and James F. Connors. October 4, 1948. 14p. diagrs. (NACA RM E8G16)

PERFORMANCE OF A RAM-JET-TYPE COMBUSTOR WITH FLAME HOLDERS IMMERSED IN THE COMBUSTION ZONE. Roland Breitwieser. November 1, 1948. 47p. diagrs., photos. (NACA RM E8F21)

EFFECT OF THREE FLAME-HOLDER CONFIGURATIONS ON SUBSONIC FLIGHT PERFORMANCE OF RECTANGULAR RAM JET OVER RANGE OF ALTITUDES. Dugald O. Black and Wesley E. Messing. November 24, 1948. 28p. diagrs., photo., tab. (NACA RM E8I01)

EFFECT OF VARIATION IN FUEL PRESSURE ON COMBUSTION PERFORMANCE OF RECTANGULAR RAM JET. Wesley E. Messing and Dugald O. Black. November 24, 1948. 26p. diagrs., photo., tab. (NACA RM E8I28)

PRELIMINARY INVESTIGATION OF EFFECTS OF COMBUSTION IN RAM JET ON PERFORMANCE OF SUPERSONIC DIFFUSERS. III - NORMAL-SHOCK DIFFUSER. Albert H. Schroeder and James F. Connors. December 22, 1948. 15p. diagrs. (NACA RM E8J18)

DESIGN FACTORS FOR 4- BY 8-INCH RAM-JET COMBUSTOR. Donald W. Male and Adolph J. Cervenka. August 11, 1949. 47p. diagrs., photos. (NACA RM E9F09)

FREE-FLIGHT PERFORMANCE OF 16-INCH-DIAMETER SUPERSONIC RAM-JET UNITS. I - FOUR UNITS DESIGNED FOR COMBUSTION-CHAMBER-INLET MACH NUMBER OF 0.12 AT FREE-STREAM MACH NUMBER OF 1.6 (UNITS A-2, A-3, A-4, AND A-5). William W. Carlton and Wesley E. Messing. September 22, 1949. 51p. diagrs., photos. (NACA RM E9F22)

EXPERIMENTAL INVESTIGATION OF PRESSURE FLUCTUATIONS IN 3.6-INCH RAM JET AT MACH NUMBER 1.92. James F. Connors and Albert H. Schroeder. October 13, 1949. 20p. diagrs., photos. (NACA RM E9H12)

PRELIMINARY INVESTIGATION OF HELMHOLTZ RESONATORS FOR DAMPING PRESSURE FLUCTUATIONS IN 3.6-INCH RAM JET AT MACH NUMBER 1.90. Jerome L. Fox. May 22, 1951. 24p. diagrs., photos. (NACA RM E51C05)

ANALYTICAL INVESTIGATION OF RAM-JET ENGINE PERFORMANCE IN FLIGHT MACH NUMBER RANGE FROM 3 TO 7. Philip J. Evans, Jr. October 1951. 29p. diagrs. (NACA RM E51H02)

EFFECT OF FUEL-AIR DISTRIBUTION ON PERFORMANCE OF A 16-INCH RAM-JET ENGINE. A. J. Cervenka and E. E. Dangle. June 1952. 25p. diagrs., photos., tab. (NACA RM E52D08)

COMBUSTION EFFICIENCY OF HOMOGENEOUS FUEL-AIR MIXTURES IN A 5-INCH RAM-JET-TYPE COMBUSTOR. Thaine W. Reynolds and Robert D. Ingebo. November 1952. 36p. diagrs., tabs. (NACA RM E52I23)

EFFECT OF FUELS ON COMBUSTION EFFICIENCY OF 5-INCH RAM-JET-TYPE COMBUSTION. Thaine W. Reynolds. May 1953. 40p. diagrs., tabs. (NACA RM E53C20)

ANALYTICAL EVALUATION OF EFFECT OF EQUIVALENCE RATIO, INLET-AIR TEMPERATURE, AND COMBUSTION PRESSURE ON PERFORMANCE OF SEVERAL POSSIBLE RAM-JET FUELS. Leonard K. Tower and Benson E. Gammon. September 1953. 59p. diagrs., tabs. (NACA RM E53G14)

IDEAL TEMPERATURE RISE DUE TO CONSTANT-PRESSURE COMBUSTION OF A JP-4 FUEL. S(idney) C. Huntley. September 1955. 53p. diagrs., tabs. (NACA RM E55G27a)

EVAPORATION OF JP-5 FUEL SPRAYS IN AIR STREAMS. Hampton H. Foster and Robert D. Ingebo. February 1956. 26p. diagrs., tabs. (NACA RM E55K02)

(3. 5. 2. 5) ROCKET ENGINES

THEORETICAL PERFORMANCE OF SOME ROCKET PROPELLANTS CONTAINING HYDROGEN, NITROGEN, AND OXYGEN. Riley O. Miller and Paul M. Ordin. May 26, 1948. 53p. diagrs., tabs. (NACA RM E8A30)

STARTING OF ROCKET ENGINE AT CONDITIONS OF SIMULATED ALTITUDE USING CRUDE MONOETHYLANILINE AND OTHER FUELS WITH MIXED ACID. Dezso J. Ladanyi, John L. Sloop, Jack C. Humphrey, and Gerald Morrell. July 19, 1950. 64p. diagrs., photos., tabs. (NACA RM E50D20)

IGNITION-DELAY CHARACTERISTICS IN MODIFIED OPEN-CUP APPARATUS OF SEVERAL FUELS WITH NITRIC ACID OXIDANTS WITHIN TEMPERATURE RANGE 70° TO -105° F. Riley O. Miller. December 1951. 30p. diagrs., 4 tabs. (NACA RM E51J11)

IGNITION DELAY EXPERIMENTS WITH SMALL-SCALE ROCKET ENGINE AT SIMULATED ALTITUDE CONDITIONS USING VARIOUS FUELS WITH NITRIC ACID OXIDANTS. Dezso J. Ladanyi. January 1952. 44p. diagrs., photos., tabs. (NACA RM E51J01)

ORTHOTOLUIDINE AND TRIETHYLAMINE IN ROCKET ENGINE APPLICATIONS. Dezso J. Ladanyi. January 1953. 24p. diagrs., tabs. (NACA RM E52K19)

AN INVESTIGATION OF HIGH-FREQUENCY COMBUSTION OSCILLATIONS IN LIQUID-PROPELLANT ROCKET ENGINES. Adelbert O. Tischler, Rudolph V. Massa and Raymond L. Mantler. June 1953. 37p. diagrs., photos. (NACA RM E53B27)

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EFFECTS OF NITROGEN TETROXIDE AND WATER CONCENTRATION ON FREEZING POINT AND IGNITION DELAY OF FUMING NITRIC ACID. Riley O. Miller. September 1953. 32p. diagrs., tabs. (NACA RM E53G31)

INVESTIGATION OF EFFECT OF FLUORIDE ON CORROSION OF 2S-0 ALUMINUM AND 347 STAINLESS STEEL IN FUMING NITRIC ACID AT 170° F. Charles E. Feiler and Gerald Morrell. February 1954. 22p. diagrs., photos., tabs. (NACA RM E53L17b)

FLAME PROPAGATION LIMITS OF PROPANE AND n-PENTANE IN OXIDES OF NITROGEN. Riley O. Miller. August 1955. 29p. diagrs., 3 tabs. (NACA TN 3520)

THEORETICAL PERFORMANCE OF JP-4 FUEL AND LIQUID OXYGEN AS A ROCKET PROPELLANT. I - FROZEN COMPOSITION. Vearl N. Huff and Anthony Fortini. April 1956. 35p. diagrs., tabs. (NACA RM E56A27)

(3.6)
Compression and Compressors

DESIGN AND TEST OF MIXED-FLOW IMPELLERS I - AERODYNAMIC DESIGN PROCEDURE. Walter M. Osborn and Joseph T. Hamrick. September 1952. 42p. diagrs., photo., tab. (NACA RM E52E05)

DESIGN AND TEST OF MIXED-FLOW IMPELLERS. II - EXPERIMENTAL RESULTS, IMPELLER MODEL MFI-1A. Joseph R. Withee, Jr., and William L. Beede. September 1952. 28p. diagrs., photos., tab. (NACA RM E52E22)

SOME EFFECTS OF GUIDE-VANE TURNING AND STATORS ON THE ROTATING STALL CHARACTERISTICS OF A HIGH HUB-TIP RATIO SINGLE-STAGE COMPRESSOR. Eleanor L. Costilow and Merle C. Huppert. April 1956. 52p. diagrs., tab. (NACA TN 3711)

(3.6.1)
FLOW THEORY AND EXPERIMENT

PRELIMINARY INVESTIGATION OF FLOW FLUCTUATIONS DURING SURGE AND BLADE ROW STALL IN AXIAL-FLOW COMPRESSORS. Merle C. Huppert. August 1952. 52p. diagrs., photos. (NACA RM E52E28)

DESIGN AND TEST OF MIXED-FLOW IMPELLERS. II - EXPERIMENTAL RESULTS, IMPELLER MODEL MFI-1A. Joseph R. Withee, Jr., and William L. Beede. September 1952. 28p. diagrs., photos., tab. (NACA RM E52E22)

PRELIMINARY INVESTIGATION OF COMPRESSOR BLADE VIBRATION EXCITED BY ROTATING STALL. Merle C. Huppert, Donald F. Johnson, and Eleanor L. Costilow. December 1952. 27p. diagrs., photos. (NACA RM E52J15)

EXPERIMENTAL AND THEORETICAL INVESTIGATION OF ROTATING-STALL CHARACTERISTICS OF SINGLE-STAGE AXIAL-FLOW COMPRESSOR WITH HUB-TIP RATIO OF 0.76. Robert W. Graham and Vasily D. Prian. November 1953. 34p. diagrs., photos., tab. (NACA RM E53I09)

TWO-DIMENSIONAL LOW-SPEED CASCADE INVESTIGATION OF NACA COMPRESSOR BLADE SECTIONS HAVING A SYSTEMATIC VARIATION IN MEAN-LINE LOADING. John R. Erwin, Melvyn Savage, and James C. Emery. November 1953. 129p. diagrs., tabs. (NACA RM L53I30b)

METHOD OF ESTIMATING THE INCOMPRESSIBLE-FLOW PRESSURE DISTRIBUTION OF COMPRESSOR BLADE SECTIONS AT DESIGN ANGLE OF ATTACK. John R. Erwin and Laura A. Yacobi. December 1953. 41p. diagrs., tab. (NACA RM L53F17)

APPROXIMATE METHOD FOR DETERMINING EQUILIBRIUM OPERATION OF COMPRESSOR COMPONENT OF TURBOJET ENGINE. Merle C. Huppert. July 1955. 25p. diagrs. (NACA TN 3517)

ROTATING-STALL CHARACTERISTICS OF A ROTOR WITH HIGH HUB-TIP RADIUS RATIO. Eleanor L. Costilow and Merle C. Huppert. August 1955. 59p. diagrs., photos. (NACA TN 3518)

A SURVEY OF UNCLASSIFIED AXIAL-FLOW-COMPRESSOR LITERATURE. Howard Z. Herzig and Arthur G. Hansen. November 1955. i, 88p. (NACA RM E55H11)

LIFT HYSTERESIS AT STALL AS AN UNSTEADY BOUNDARY-LAYER PHENOMENON. Franklin K. Moore. November 1955. 32p. diagrs., tab. (NACA TN 3571)

FLOW OF GAS THROUGH TURBINE LATTICES. M. E. Deich. May 1956. 136p. diagrs., photos. (NACA TM 1393. Trans. of Russian book: Technical Gasdynamics, ch. 7, 1953, p. 312-420)

(3.6.1.1)
AXIAL FLOW

EXPERIMENTAL INVESTIGATION OF THRUST AUGMENTATION OF 4000-POUND-THRUST AXIAL-FLOW-TYPE TURBOJET ENGINE BY INTERSTAGE INJECTION OF WATER-ALCOHOL MIXTURES IN COMPRESSOR. John H. Povolny, James W. Useller, and Louis J. Chelko. April 6, 1950. 42p. diagrs., photos., tab. (NACA RM E9K30)

ALTITUDE INVESTIGATION OF PERFORMANCE OF TURBINE-PROPELLER ENGINE AND ITS COMPONENTS. Lewis E. Wallner and Martin J. Saari. October 5, 1950. 65p. diagrs., photos. (NACA RM E50H30)

SYSTEMATIC TWO-DIMENSIONAL CASCADE TESTS OF NACA 65-SERIES COMPRESSOR BLADES AT LOW SPEEDS. L. Joseph Herrig, James C. Emery, and John R. Erwin. September 1951. 223p. diagrs., photo., tabs. (NACA RM L51G31)

SOME EFFECTS OF BLADE TRAILING-EDGE THICKNESS ON PERFORMANCE OF A SINGLE-STAGE AXIAL-FLOW COMPRESSOR. J. J. Moses and G. K. Serovy. October 1951. 14p. diagrs., tab. (NACA RM E51F28)

COMPARISON OF NACA 65-SERIES COMPRESSOR-BLADE PRESSURE DISTRIBUTIONS AND PERFORMANCE IN A ROTOR AND IN CASCADE. Willard R. Westphal and William R. Godwin. November 1951. 53p. diagrs., photos. (NACA RM L51H20)

EFFECT OF SECTION THICKNESS AND TRAILING-EDGE RADIUS ON THE PERFORMANCE OF NACA 65-SERIES COMPRESSOR BLADES IN CASCADE AT LOW SPEEDS. L. Joseph Herrig, James C. Emery, and John R. Erwin. December 1951. 66p. diagrs., tabs. (NACA RM L51J16)

PRELIMINARY INVESTIGATION OF COMPRESSOR BLADE VIBRATION EXCITED BY ROTATING STALL. Merle C. Huppert, Donald F. Johnson, and Eleanor L. Costilow. December 1952. 27p. diagrs., photos. (NACA RM E52J15)

INTERSTAGE SURVEYS AND ANALYSIS OF VISCOUS ACTION IN LATTER STAGES OF A MULTISTAGE AXIAL-FLOW COMPRESSOR. William B. Briggs and Charles C. Giamati. March 1953. 51p. diagrs., photo., tab. (NACA RM E52I12)

A COMPARISON OF TYPICAL NATIONAL GAS TURBINE ESTABLISHMENT AND NACA AXIAL-FLOW COMPRESSOR BLADE SECTIONS IN CASCADE AT LOW SPEED. A. Richard Felix and James C. Emery. May 1953. 46p. diagrs., photo., tabs. (NACA RM L53B26a)

EXPERIMENTAL AND THEORETICAL INVESTIGATION OF ROTATING-STALL CHARACTERISTICS OF SINGLE-STAGE AXIAL-FLOW COMPRESSOR WITH HUB-TIP RATIO OF 0.76. Robert W. Graham and Vasily D. Prian. November 1953. 34p. diagrs., photos., tab. (NACA RM E53I09)

TWO-DIMENSIONAL LOW-SPEED CASCADE INVESTIGATION OF NACA COMPRESSOR BLADE SECTIONS HAVING A SYSTEMATIC VARIATION IN MEAN-LINE LOADING. John R. Erwin, Melvyn Savage, and James C. Emery. November 1953. 129p. diagrs., tabs. (NACA RM L53I30b)

SUMMARY OF 65-SERIES COMPRESSOR-BLADE LOW-SPEED CASCADE DATA BY USE OF THE CARPET-PLOTTING TECHNIQUE. A. Richard Felix. November 1954. 9p. diagrs. (NACA RM L54H18a)

ANALYSIS OF TWO-DIMENSIONAL COMPRESSIBLE-FLOW LOSS CHARACTERISTICS DOWNSTREAM OF TURBOMACHINE BLADE ROWS IN TERMS OF BASIC BOUNDARY-LAYER CHARACTERISTICS. Warner L. Stewart. July 1955. 48p. diagrs. (NACA TN 3515)

APPROXIMATE METHOD FOR DETERMINING EQUILIBRIUM OPERATION OF COMPRESSOR COMPONENT OF TURBOJET ENGINE. Merle C. Huppert. July 1955. 25p. diagrs. (NACA TN 3517)

ROTATING-STALL CHARACTERISTICS OF A ROTOR WITH HIGH HUB-TIP RADIUS RATIO. Eleanor L. Costilow and Merle C. Huppert. August 1955. 59p. diagrs., photos. (NACA TN 3518)

A SURVEY OF UNCLASSIFIED AXIAL-FLOW-COMPRESSOR LITERATURE. Howard Z. Herzig and Arthur G. Hansen. November 1955. i, 88p. (NACA RM E55H11)

CROSS FLOWS IN LAMINAR INCOMPRESSIBLE BOUNDARY LAYERS. Arthur G. Hansen and Howard Z. Herzig. February 1956. 50p. diagrs., photos., tabs. (NACA TN 3651)

SOME EFFECTS OF GUIDE-VANE TURNING AND STATORS ON THE ROTATING STALL CHARACTERISTICS OF A HIGH HUB-TIP RATIO SINGLE-STAGE COMPRESSOR. Eleanor L. Costilow and Merle C. Huppert. April 1956. 52p. diagrs., tab. (NACA TN 3711)

STALL PROPAGATION IN AXIAL-FLOW COMPRESSORS. Alan H. Stenning, Anthony R. Kriebel, and Stephen R. Montgomery, Massachusetts Institute of Technology. June 1956. 83p. diagrs., photos., tab. (NACA TN 3580)

(3.6.1.2) RADIAL FLOW

THEORETICAL ANALYSIS OF INCOMPRESSIBLE FLOW THROUGH A RADIAL-INLET CENTRIFUGAL IMPELLER AT VARIOUS WEIGHT FLOWS. I - SOLUTION BY A MATRIX METHOD AND COMPARISON WITH AN APPROXIMATE METHOD. Vasily D. Prian, James J. Kramer and Chung-Hua Wu. June 1955. 39p. diagrs., tab. (NACA TN 3448)

THEORETICAL ANALYSIS OF INCOMPRESSIBLE FLOW THROUGH A RADIAL-INLET CENTRIFUGAL IMPELLER AT VARIOUS WEIGHT FLOWS. II - SOLUTION IN LEADING-EDGE REGION BY RELAXATION METHODS. James J. Kramer. June 1955. 19p. diagrs. (NACA TN 3449)

A SURVEY OF UNCLASSIFIED AXIAL-FLOW-COMPRESSOR LITERATURE. Howard Z. Herzig and Arthur G. Hansen. November 1955. i, 88p. (NACA RM E55H11)

(3.6.1.3) MIXED FLOW

DESIGN AND TEST OF MIXED-FLOW IMPELLERS I - AERODYNAMIC DESIGN PROCEDURE. Walter M. Osborn and Joseph T. Hamrick. September 1952. 42p. diagrs., photo., tab. (NACA RM E52E05)

DESIGN AND TEST OF MIXED-FLOW IMPELLERS. II - EXPERIMENTAL RESULTS, IMPELLER MODEL MFI-1A. Joseph R. Withee, Jr., and William L. Beede. September 1952. 28p. diagrs., photos., tab. (NACA RM E52E22)

A SURVEY OF UNCLASSIFIED AXIAL-FLOW-COMPRESSOR LITERATURE. Howard Z. Herzig and Arthur G. Hansen. November 1955. i, 88p. (NACA RM E55H11)

(3.6.2)
STRESS AND VIBRATION

PRELIMINARY INVESTIGATION OF COMPRESSOR BLADE VIBRATION EXCITED BY ROTATING STALL. Merle C. Huppert, Donald F. Johnson, and Eleanor L. Costilow. December 1952. 27p. diagrs., photos. (NACA RM E52J15)

ROTATING-STALL CHARACTERISTICS OF A ROTOR WITH HIGH HUB-TIP RADIUS RATIO. Eleanor L. Costilow and Merle C. Huppert. August 1955. 59p. diagrs., photos. (NACA TN 3518)

EXPERIMENTAL INVESTIGATION OF BLADE FLUTTER IN AN ANNULAR CASCADE. J. R. Rowe and A. Mendelson. November 1955. 24p. diagrs., photos. (NACA TN 3581)

(3.7) Turbines

(3.7.1) FLOW THEORY AND EXPERIMENT

VISUALIZATION STUDY OF SECONDARY FLOWS IN TURBINE ROTOR TIP REGIONS. Hubert W. Allen and Milton G. Kofskey. September 1955. 33p. diagrs., photos., tab. (NACA TN 3519)

FLOW OF GAS THROUGH TURBINE LATTICES. M. E. Deich. May 1956. 136p. diagrs., photos. (NACA TM 1393. Trans. of Russian book: Technical Gasdynamics, ch. 7, 1953, p. 312-420)

(3.7.1.1) AXIAL FLOW

ALTITUDE INVESTIGATION OF PERFORMANCE OF TURBINE-PROPELLER ENGINE AND ITS COMPONENTS. Lewis E. Wallner and Martin J. Saari. October 5, 1950. 65p. diagrs., photos. (NACA RM E50H30)

TWO-DIMENSIONAL CASCADE INVESTIGATION OF THE MAXIMUM EXIT TANGENTIAL VELOCITY COMPONENT AND OTHER FLOW CONDITIONS AT THE EXIT OF SEVERAL TURBINE BLADE DESIGNS AT SUPERCRITICAL PRESSURE RATIOS. Cavour H. Hauser and Henry W. Plohr. August 1951. 34p. diagrs., photos. (NACA RM E51F12)

INVESTIGATION OF A RELATED SERIES OF TURBINE-BLADE PROFILES IN CASCADE. James C. Dunavant and John R. Erwin. December 1953. 100p. diagrs. (NACA RM L53G15)

ANALYSIS OF TWO-DIMENSIONAL COMPRESSIBLE-FLOW LOSS CHARACTERISTICS DOWNSTREAM OF TURBOMACHINE BLADE ROWS IN TERMS OF BASIC BOUNDARY-LAYER CHARACTERISTICS. Warner L. Stewart. July 1955. 48p. diagrs. (NACA TN 3515)

VISUALIZATION STUDY OF SECONDARY FLOWS IN TURBINE ROTOR TIP REGIONS. Hubert W. Allen and Milton G. Kofskey. September 1955. 33p. diagrs., photos., tab. (NACA TN 3519)

(3.7.1.3) MIXED FLOW

ANALYTICAL STUDY OF LOSSES AT OFF-DESIGN CONDITIONS FOR A FIXED-GEOMETRY TURBINE. Warner L. Stewart and David G. Evans. February 1954. 48p. diagrs., tab. (NACA RM E53K06)

(3.7.2) COOLING

WIRE CLOTH AS POROUS MATERIAL FOR TRANSPIRATION-COOLED WALLS. E. R. G. Eckert, Martin R. Kinsler, and Reeves P. Cochran. November 1951. 38p. diagrs., photos., tab. (NACA RM E51H23)

ANALYSIS OF COOLANT-FLOW REQUIREMENTS FOR AN IMPROVED, INTERNAL-STRUT-SUPPORTED, AIR-COOLED TURBINE-ROTOR BLADE. Wilson B. Schramm and Alfred J. Nachtigall. February 1952. 26p. diagrs., photo. (NACA RM E51L13)

EXPERIMENTAL INVESTIGATION OF AIR-COOLED TURBINE BLADES IN TURBOJET ENGINE. XI - INTERNAL-STRUT-SUPPORTED ROTOR BLADE. Reeves P. Cochran, Francis S. Stepka, and Morton H. Krasner. June 1952. 45p. diagrs., photos., tabs. (NACA RM E52C21)

EXPERIMENTAL INVESTIGATION OF AIR-COOLED TURBINE BLADES IN TURBOJET ENGINE. XII - COOLING EFFECTIVENESS OF A BLADE WITH AN INSERT AND WITH FINS MADE OF A CONTINUOUS CORRUGATED SHEET. Edward R. Bartoo and John L. Clure. August 1952. 33p. diagrs., photos. (NACA RM E52F24)

PROCEDURE FOR CALCULATING TURBINE BLADE TEMPERATURES AND COMPARISON OF CALCULATED WITH OBSERVED VALUES FOR TWO STATIONARY AIR-COOLED BLADES. W. Byron Brown, Henry O. Slone, and Hadley T. Richards. September 1952. 38p. diagrs. (NACA RM E52H07)

EXPERIMENTAL INVESTIGATION OF AIR-COOLED TURBINE BLADES IN TURBOJET ENGINE. XIII - ENDURANCE EVALUATION OF SEVERAL PROTECTIVE COATINGS APPLIED TO TURBINE BLADES OF NONSTRATEGIC STEELS. Edward R. Bartoo and John L. Clure. July 1953. 40p. photos., diagrs., tabs. (NACA RM E53E18)

EXPERIMENTAL INVESTIGATION OF AIR-COOLED TURBINE BLADES IN TURBOJET ENGINE. XIV - ENDURANCE EVALUATION OF SHELL-SUPPORTED TURBINE ROTOR BLADES MADE OF TIMKEN 17-22A(S) STEEL. Francis S. Stepka, H. Robert Bear, and John L. Clure. September 1954. 29p. diagrs., photos., tabs. (NACA RM E54F23a)

EXPERIMENTAL INVESTIGATION OF FREE-CONVECTION HEAT TRANSFER IN VERTICAL TUBE AT LARGE GRASHOF NUMBERS. E. R. G. Eckert and A. J. Diaguila. 1955. ii, 14p. diagrs., photos., tab. (NACA Rept. 1211. Supersedes RM E52F30)

CALCULATIONS OF LAMINAR HEAT TRANSFER AROUND CYLINDERS OF ARBITRARY CROSS SECTION AND TRANSPIRATION-COOLED WALLS WITH APPLICATION TO TURBINE BLADE COOLING. E. R. G. Eckert and J. N. B. Livingood. 1955. ii, 21p. diagrs., tabs. (NACA Rept. 1220. Supersedes RM E51F22)

EXACT SOLUTIONS OF LAMINAR-BOUNDARY-LAYER EQUATIONS WITH CONSTANT PROPERTY VALUES FOR POROUS WALL WITH VARIABLE TEMPERATURE. Patrick L. Donoughe and John N. B. Livingood. 1955. ii, 21p. diagrs., tabs. (NACA Rept. 1229. Supersedes TN 3151)

LAMINAR SEPARATION OVER A TRANSPIRATION-COOLED SURFACE IN COMPRESSIBLE FLOW. Morris Morduchow, Polytechnic Institute of Brooklyn. December 1955. 32p. diagrs. (NACA TN 3559)

FREE-CONVECTION EFFECTS ON HEAT TRANSFER FOR TURBULENT FLOW THROUGH A VERTICAL TUBE. E. R. G. Eckert, Anthony J. Diaguila, and John N. B. Livingood. December 1955. 24p. diagrs. (NACA TN 3584)

SUMMARY OF LAMINAR-BOUNDARY-LAYER SOLUTIONS FOR WEDGE-TYPE FLOW OVER CONVECTION- AND TRANSPIRATION-COOLED SURFACES. John N. B. Livingood and Patrick L. Donoughe. December 1955. 33p. diagrs., tabs. (NACA TN 3588)

EXPERIMENTAL INVESTIGATION OF AIR-FLOW UNIFORMITY AND PRESSURE LEVEL ON WIRE CLOTH FOR TRANSPIRATION-COOLING APPLICATIONS. Patrick L. Donoughe and Roy A. McKinnon. January 1956. 28p. diagrs., photos., tab. (NACA TN 3652. Supersedes RM E52E16)

METHOD OF CALCULATING CORE DIMENSIONS OF CROSSFLOW HEAT EXCHANGER WITH PRESCRIBED GAS FLOWS AND INLET AND EXIT STATES. E. R. G. Eckert and Anthony J. Diaguila. April 1956. 25p. diagrs. (NACA TN 3655)

SELECTION OF OPTIMUM CONFIGURATIONS FOR HEAT EXCHANGER WITH ONE DOMINATING FILM RESISTANCE. E. R. G. Eckert and T. F. Irvine, Jr. June 1956. 48p. diagrs. (NACA TN 3713)

(3.7.3)
STRESS AND VIBRATION

PRELIMINARY INVESTIGATION IN J33 TURBOJET ENGINE OF SEVERAL ROOT DESIGNS FOR CERAMAL TURBINE BLADES. George C. Deutsch, Andre J. Meyer, Jr. and William C. Morgan. January 1953. 24p. diagrs., photos., 2 tabs. (NACA RM E52K13)

COMPARATIVE TENSILE STRENGTHS AT 1200° F OF VARIOUS ROOT DESIGNS FOR CERMET TURBINE BLADES. Andre J. Meyer, Jr., Albert Kaufman, and Howard F. Calvert. June 1953. 23p. diagrs., photos., tabs. (NACA RM E53C25)

EXPERIMENTAL INVESTIGATION OF AIR-COOLED TURBINE BLADES IN TURBOJET ENGINE. XIV - ENDURANCE EVALUATION OF SHELL-SUPPORTED TURBINE ROTOR BLADES MADE OF TIMKEN 17-22A(S) STEEL. Francis S. Stepka, H. Robert Bear, and John L. Clure. September 1954. 29p. diagrs., photos., tabs. (NACA RM E54F23a)

(3.8)
Friction and Lubrication

EVALUATION OF A SILICONE-DIESTER LUBRICANT IN BENCH STUDIES AND IN A TURBOPROPELLER ENGINE. Robert L. Johnson, S. F. Murray, and Edmond E. Bisson. Appendix D: COPY OF REPORT BY SILICONE PRODUCTS DEPARTMENT OF GENERAL ELECTRIC ON NACA SD-17 FLUID. N. G. Holdstock, General Electric Company. May 1954. 32p. diagrs., photos., tabs. (NACA RM E54B05)

(3.8.1)
THEORY AND EXPERIMENT

EXPERIMENTAL INVESTIGATION OF ECCENTRICITY RATIO, FRICTION, AND OIL FLOW OF LONG AND SHORT JOURNAL BEARINGS WITH LOAD-NUMBER CHARTS. G(eorge) B. DuBois, F(red) W. Ocvirk, and R. L. Wehe, Cornell University. September 1955. 63p. diagrs., tabs. (NACA TN 3491)

FRICTION STUDIES OF GRAPHITE AND MIXTURES OF GRAPHITE WITH SEVERAL METALLIC OXIDES AND SALTS AT TEMPERATURES TO 1000° F. Marshall B. Peterson and Robert L. Johnson. February 1956. 16p. diagrs., photos. (NACA TN 3657)

(3.8.1.1)
HYDRODYNAMIC THEORY

EXPERIMENTS WITH A ROTATING-CYLINDER VISCOMETER AT HIGH SHEAR RATES. J. A. Cole, R. E. Petersen and H. W. Emmons, Harvard University. June 1955. 31p. diagrs., tab. (NACA TN 3382)

(3.8.1.2)
CHEMISTRY OF LUBRICATION

EVALUATION OF A SILICONE-DIESTER LUBRICANT IN BENCH STUDIES AND IN A TURBOPROPELLER ENGINE. Robert L. Johnson, S. F Murray, and Edmond E. Bisson. Appendix D: COPY OF REPORT BY SILICONE PRODUCTS DEPARTMENT OF GENERAL ELECTRIC ON NACA SD-17 FLUID. N. G. Holdstock, General Electric Company. May 1954. 32p. diagrs., photos., tabs. (NACA RM E54B05)

SPONTANEOUS IGNITION STUDIES RELATING TO LUBRICANTS OF REDUCED FLAMMABILITY. Kenneth T. Mecklenborg, Cincinnati University. January 1956. 17p. diagrs., tabs. (NACA TN 3560)

FRICTION STUDIES OF GRAPHITE AND MIXTURES OF GRAPHITE WITH SEVERAL METALLIC OXIDES AND SALTS AT TEMPERATURES TO 1000° F. Marshall B. Peterson and Robert L. Johnson. February 1956. 16p. diagrs., photos. (NACA TN 3657)

(3.8.1.3)
SURFACE CONDITIONS

WEAR OF TYPICAL CARBON-BASE SLIDING SEAL MATERIALS AT TEMPERATURES TO 700° F. Robert L. Johnson, Max A. Swikert, and John M. Bailey. February 1956. 22p. diagrs., photos., tab. (NACA TN 3595)

(3.8.2)
SLIDING CONTACT SURFACES

WEAR OF TYPICAL CARBON-BASE SLIDING SEAL MATERIALS AT TEMPERATURES TO 700° F. Robert L. Johnson, Max A. Swikert, and John M. Bailey. February 1956. 22p. diagrs., photos., tab. (NACA TN 3595)

(3.8.2.1)
SLEEVE BEARINGS

EXPERIMENTAL INVESTIGATION OF ECCENTRICITY RATIO, FRICTION, AND OIL FLOW OF LONG AND SHORT JOURNAL BEARINGS WITH LOAD-NUMBER CHARTS. G(eorge) B. DuBois, F(red) W. Ocvirk, and R. L. Wehe, Cornell University. September 1955. 63p. diagrs., tabs. (NACA TN 3491)

(3.8.4)
SLIDING AND ROLLING CONTACT SURFACES

(3.8.4.1)
GEARS

EVALUATION OF A SILICONE-DIESTER LUBRICANT IN BENCH STUDIES AND IN A TURBOPROPELLER ENGINE. Robert L. Johnson, S. F. Murray, and Edmond E. Bisson. Appendix D: COPY OF REPORT BY SILICONE PRODUCTS DEPARTMENT OF GENERAL ELECTRIC ON NACA SD-17 FLUID. N. G. Holdstock, General Electric Company. May 1954. 32p. diagrs., photos., tabs. (NACA RM E54B05)

(3.8.5) LUBRICANTS

EVALUATION OF A SILICONE-DIESTER LUBRICANT IN BENCH STUDIES AND IN A TURBOPROPELLER ENGINE. Robert L. Johnson. S. F. Murray, and Edmond E. Bisson. Appendix D: COPY OF REPORT BY SILICONE PRODUCTS DEPARTMENT OF GENERAL ELECTRIC ON NACA SD-17 FLUID. N. G. Holdstock, General Electric Company. May 1954. 32p. diagrs., photos., tabs. (NACA RM E54B05)

EXPERIMENTS WITH A ROTATING-CYLINDER VISCOMETER AT HIGH SHEAR RATES. J. A. Cole, R. E. Petersen and H. W. Emmons, Harvard University. June 1955. 31p. diagrs., tab. (NACA TN 3382)

SPONTANEOUS IGNITION STUDIES RELATING TO LUBRICANTS OF REDUCED FLAMMABILITY. Kenneth T. Mecklenborg, Cincinnati University. January 1956. 17p. diagrs., tabs. (NACA TN 3560)

FRICTION STUDIES OF GRAPHITE AND MIXTURES OF GRAPHITE WITH SEVERAL METALLIC OXIDES AND SALTS AT TEMPERATURES TO 1000° F. Marshall B. Peterson and Robert L. Johnson. February 1956. 16p. diagrs., photos. (NACA TN 3657)

(3.9)
Heat Transfer

HEAT TRANSFER AT THE FORWARD STAGNATION POINT OF BLUNT BODIES. Eli Reshotko and Clarence B. Cohen. July 1955. 17p. diagrs. (NACA TN 3513)

VISUAL STUDY OF FREE CONVECTION IN A NARROW VERTICAL ENCLOSURE. Ephraim M. Sparrow and Samuel J. Kaufman. February 1956. 14p. diagr., photos. (NACA RM E55L14a)

METHOD OF CALCULATING CORE DIMENSIONS OF CROSSFLOW HEAT EXCHANGER WITH PRESCRIBED GAS FLOWS AND INLET AND EXIT STATES. E. R. G. Eckert and Anthony J. Diaguila. April 1956. 25p. diagrs. (NACA TN 3655)

SELECTION OF OPTIMUM CONFIGURATIONS FOR HEAT EXCHANGER WITH ONE DOMINATING FILM RESISTANCE. E. R. G. Eckert and T. F. Irvine, Jr. June 1956. 48p. diagrs. (NACA TN 3713)

(3.9.1)
THEORY AND EXPERIMENT

EXPERIMENTAL INVESTIGATION OF AIR-COOLED TURBINE BLADES IN TURBOJET ENGINE. XII - COOLING EFFECTIVENESS OF A BLADE WITH AN INSERT AND WITH FINS MADE OF A CONTINUOUS CORRUGATED SHEET. Edward R. Bartoo and John L. Clure. August 1952. 33p. diagrs., photos. (NACA RM E52F24)

ANALYSIS OF TURBULENT HEAT TRANSFER, MASS TRANSFER, AND FRICTION IN SMOOTH TUBES AT HIGH PRANDTL AND SCHMIDT NUMBERS. Robert G. Deissler. 1955. ii, 14p. diagrs. (NACA Rept. 1210. Supersedes TN 3145)

EXPERIMENTAL INVESTIGATION OF FREE-CONVECTION HEAT TRANSFER IN VERTICAL TUBE AT LARGE GRASHOF NUMBERS. E. R. G. Eckert and A. J. Diaguila. 1955. ii, 14p. diagrs., photos., tab. (NACA Rept. 1211. Supersedes RM E52F30)

CALCULATIONS OF LAMINAR HEAT TRANSFER AROUND CYLINDERS OF ARBITRARY CROSS SECTION AND TRANSPIRATION-COOLED WALLS WITH APPLICATION TO TURBINE BLADE COOLING. E. R. G. Eckert and J. N. B. Livingood. 1955. ii, 21p. diagrs., tabs. (NACA Rept. 1220. Supersedes RM E51F22)

THEORETICAL AND EXPERIMENTAL INVESTIGATION OF HEAT TRANSFER BY LAMINAR NATURAL CONVECTION BETWEEN PARALLEL PLATES. A. F. Lietzke. 1955. ii, 7p. diagrs. (NACA Rept. 1223. Supersedes TN 3328)

EXACT SOLUTIONS OF LAMINAR-BOUNDARY-LAYER EQUATIONS WITH CONSTANT PROPERTY VALUES FOR POROUS WALL WITH VARIABLE TEMPERATURE. Patrick L. Donoughe and John N. B. Livingood. 1955. ii, 21p. diagrs., tabs. (NACA Rept. 1229. Supersedes TN 3151)

PRACTICAL CONSIDERATIONS IN SPECIFIC APPLICATIONS OF GAS-FLOW INTERFEROMETRY. Walton L. Howes and Donald R. Buchele. July 1955. ii, 95p. diagrs., photos. (NACA TN 3507)

LAMINAR FREE CONVECTION ON A VERTICAL PLATE WITH PRESCRIBED NONUNIFORM WALL HEAT FLUX OR PRESCRIBED NONUNIFORM WALL TEMPERATURE. E. M. Sparrow. July 1955. 34p. diagrs. (NACA TN 3508)

RESPONSE OF HOMOGENEOUS AND TWO-MATERIAL LAMINATED CYLINDERS TO SINUSOIDAL ENVIRONMENTAL TEMPERATURE CHANGE, WITH APPLICATIONS TO HOT-WIRE ANEMOMETRY AND THERMOCOUPLE PYROMETRY. Herman H. Lowell and Norman (A.) Patton. September 1955. ii, 143p. diagrs., tabs. (NACA TN 3514)

HEAT LOSS FROM YAWED HOT WIRES AT SUBSONIC MACH NUMBERS. Virgil A. Sandborn and James C. Laurence. September 1955. 44p. diagrs., photo. (NACA TN 3563)

FREE-CONVECTION EFFECTS ON HEAT TRANSFER FOR TURBULENT FLOW THROUGH A VERTICAL TUBE. E. R. G. Eckert, Anthony J. Diaguila, and John N. B. Livingood. December 1955. 24p. diagrs. (NACA TN 3584)

SUMMARY OF LAMINAR-BOUNDARY-LAYER SOLUTIONS FOR WEDGE-TYPE FLOW OVER CONVECTION- AND TRANSPIRATION-COOLED SURFACES. John N. B. Livingood and Patrick L. Donoughe. December 1955. 33p. diagrs., tabs. (NACA TN 3588)

VISUAL STUDY OF FREE CONVECTION IN A NARROW VERTICAL ENCLOSURE. Ephraim M. Sparrow and Samuel J. Kaufman. February 1956. 14p. diagr., photos. (NACA RM E55L14a)

(3.9.1.1)
CASCADES

PROCEDURE FOR CALCULATING TURBINE BLADE TEMPERATURES AND COMPARISON OF CALCULATED WITH OBSERVED VALUES FOR TWO STATIONARY AIR-COOLED BLADES. W. Byron Brown, Henry O. Slone, and Hadley T. Richards. September 1952. 38p. diagrs. (NACA RM E52H07)

(3.9.2)
HEAT EXCHANGERS

COOLING OF RAM JETS AND TAIL-PIPE BURNERS - ANALYTICAL METHOD FOR DETERMINING TEMPERATURES OF COMBUSTION CHAMBER HAVING ANNULAR COOLING PASSAGE. William K. Koffel, Eugene Stamper, and Newell D. Sanders. March 21, 1950. 51p. diagrs., tab. (NACA RM E9L09)

METHOD OF CALCULATING CORE DIMENSIONS OF CROSSFLOW HEAT EXCHANGER WITH PRESCRIBED GAS FLOWS AND INLET AND EXIT STATES. E. R. G. Eckert and Anthony J. Diaguila. April 1956. 25p. diagrs. (NACA TN 3655)

SELECTION OF OPTIMUM CONFIGURATIONS FOR HEAT EXCHANGER WITH ONE DOMINATING FILM RESISTANCE. E. R. G. Eckert and T. F. Irvine, Jr. June 1956. 48p. diagrs. (NACA TN 3713)

(3. 9. 2. 4)
REGENERATORS

INVESTIGATION OF INTERNAL REGENERATIVE FUEL-HEATING SYSTEM FOR 20-INCH RAM JET. Sol Baker and Eugene Perchonok. September 1, 1949. 22p. diagrs., photos. (NACA RM E9F20)

(3.10)
Cooling of Engines

WIRE CLOTH AS POROUS MATERIAL FOR TRANSPIRATION-COOLED WALLS. E. R. G. Eckert, Martin R. Kinsler, and Reeves P. Cochran. November 1951. 38p. diagrs., photos., tab. (NACA RM E51H23)

CHARTS OF BOUNDARY-LAYER MASS FLOW AND MOMENTUM FOR INLET PERFORMANCE ANALYSIS MACH NUMBER RANGE, 0.2 TO 5.0. Paul C. Simon and Kenneth L. Kowalski. November 1955. 32p. diagrs., tab. (NACA TN 3583)

EXPERIMENTAL INVESTIGATION OF AIR-FLOW UNIFORMITY AND PRESSURE LEVEL ON WIRE CLOTH FOR TRANSPIRATION-COOLING APPLICATIONS. Patrick L. Donoughe and Roy A. McKinnon. January 1956. 28p. diagrs., photos., tab. (NACA TN 3652. Supersedes RM E52E16)

(3.10.2)
GAS-TURBINE SYSTEMS

COOLING OF RAM JETS AND TAIL-PIPE BURNERS - ANALYTICAL METHOD FOR DETERMINING TEMPERATURES OF COMBUSTION CHAMBER HAVING ANNULAR COOLING PASSAGE. William K. Koffel, Eugene Stamper, and Newell D. Sanders. March 21, 1950. 51p. diagrs., tab. (NACA RM E9L09)

EXPERIMENTAL INVESTIGATION OF THRUST AUGMENTATION OF 4000-POUND-THRUST AXIAL-FLOW-TYPE TURBOJET ENGINE BY INTERSTAGE INJECTION OF WATER-ALCOHOL MIXTURES IN COMPRESSOR. John H. Povolny, James W. Useller, and Louis J. Chelko. April 6, 1950. 42p. diagrs., photos., tab. (NACA RM E9K30)

WIRE CLOTH AS POROUS MATERIAL FOR TRANSPIRATION-COOLED WALLS. E. R. G. Eckert, Martin R. Kinsler, and Reeves P. Cochran. November 1951. 38p. diagrs., photos., tab. (NACA RM E51H23)

ANALYSIS OF COOLANT-FLOW REQUIREMENTS FOR AN IMPROVED, INTERNAL-STRUT-SUPPORTED, AIR-COOLED TURBINE-ROTOR BLADE. Wilson B. Schramm and Alfred J. Nachtigall. February 1952. 26p. diagrs., photo. (NACA RM E51L13)

EXPERIMENTAL INVESTIGATION OF AIR-COOLED TURBINE BLADES IN TURBOJET ENGINE. XI - INTERNAL-STRUT-SUPPORTED ROTOR BLADE. Reeves P. Cochran, Francis S. Stepka, and Morton H. Krasner. June 1952. 45p. diagrs., photos., tabs. (NACA RM E52C21)

PRELIMINARY AIR-FLOW AND THRUST CALIBRATIONS OF SEVERAL CONICAL COOLING-AIR EJECTORS WITH A PRIMARY TO SECONDARY TEMPERATURE RATIO OF 1.0. I - DIAMETER RATIOS OF 1.21 AND 1.10. W. K. Greathouse and D. P. Hollister. July 1952. 24p. diagrs. (NACA RM E52E21)

EXPERIMENTAL INVESTIGATION OF AIR-COOLED TURBINE BLADES IN TURBOJET ENGINE. XII - COOLING EFFECTIVENESS OF A BLADE WITH AN INSERT AND WITH FINS MADE OF A CONTINUOUS CORRUGATED SHEET. Edward R. Bartoo and John L. Clure. August 1952. 33p. diagrs., photos. (NACA RM E52F24)

PRELIMINARY AIR-FLOW AND THRUST CALIBRATIONS OF SEVERAL CONICAL COOLING-AIR EJECTORS WITH A PRIMARY TO SECONDARY TEMPERATURE RATIO OF 1.0. II - DIAMETER RATIOS OF 1.06 AND 1.40. W. K. Greathouse and D. P. Hollister. August 1952. 35p. diagrs. (NACA RM E52F26)

EXPERIMENTAL INVESTIGATION OF AIR-COOLED TURBINE BLADES IN TURBOJET ENGINE. XIII - ENDURANCE EVALUATION OF SEVERAL PROTECTIVE COATINGS APPLIED TO TURBINE BLADES OF NONSTRATEGIC STEELS. Edward R. Bartoo and John L. Clure. July 1953. 40p. photos., diagrs., tabs. (NACA RM E53E18)

EXPERIMENTAL INVESTIGATION OF FREE-CONVECTION HEAT TRANSFER IN VERTICAL TUBE AT LARGE GRASHOF NUMBERS. E. R. G. Eckert and A. J. Diaguila. 1955. ii, 14p. diagrs., photos., tab. (NACA Rept. 1211. Supersedes RM E52F30)

CALCULATIONS OF LAMINAR HEAT TRANSFER AROUND CYLINDERS OF ARBITRARY CROSS SECTION AND TRANSPIRATION-COOLED WALLS WITH APPLICATION TO TURBINE BLADE COOLING. E. R. G. Eckert and J. N. B. Livingood. 1955. ii, 21p. diagrs., tabs. (NACA Rept. 1220. Supersedes RM E51F22)

LAMINAR FREE CONVECTION ON A VERTICAL PLATE WITH PRESCRIBED NONUNIFORM WALL HEAT FLUX OR PRESCRIBED NONUNIFORM WALL TEMPERATURE. E. M. Sparrow. July 1955. 34p. diagrs. (NACA TN 3508)

FREE-CONVECTION EFFECTS ON HEAT TRANSFER FOR TURBULENT FLOW THROUGH A VERTICAL TUBE. E. R. G. Eckert, Anthony J. Diaguila, and John N. B. Livingood. December 1955. 24p. diagrs. (NACA TN 3584)

EXPERIMENTAL INVESTIGATION OF AIR-FLOW UNIFORMITY AND PRESSURE LEVEL ON WIRE CLOTH FOR TRANSPIRATION-COOLING APPLICATIONS. Patrick L. Donoughe and Roy A. McKinnon. January 1956. 28p. diagrs., photos., tab. (NACA TN 3652. Supersedes RM E52E16)

METHOD OF CALCULATING CORE DIMENSIONS OF CROSSFLOW HEAT EXCHANGER WITH PRESCRIBED GAS FLOWS AND INLET AND EXIT STATES. E. R. G. Eckert and Anthony J. Diaguila. April 1956. 25p. diagrs. (NACA TN 3655)

PERFORATED SHEETS AS A POROUS MATERIAL FOR DISTRIBUTED SUCTION AND INJECTION. Robert E. Dannenberg, Bruno J. Gambucci, and James A. Weiberg. April 1956. 27p. diagrs., photos. (NACA TN 3669)

SELECTION OF OPTIMUM CONFIGURATIONS FOR HEAT EXCHANGER WITH ONE DOMINATING FILM RESISTANCE. E. R. G. Eckert and T. F. Irvine, Jr. June 1956. 48p. diagrs. (NACA TN 3713)

(3.10.3)
RAM JETS

INVESTIGATION OF EFFECTS OF MOVABLE EXHAUST-NOZZLE PLUG ON OPERATIONAL PERFORMANCE OF 20-INCH RAM JET. William H. Sterbentz and Fred A. Wilcox. July 27, 1948. 32p. diagrs., photos. (NACA RM E8D22)

COOLING OF RAM JETS AND TAIL-PIPE BURNERS - ANALYTICAL METHOD FOR DETERMINING TEMPERATURES OF COMBUSTION CHAMBER HAVING ANNULAR COOLING PASSAGE. William K. Koffel, Eugene Stamper, and Newell D. Sanders. March 21, 1950. 51p. diagrs., tab. (NACA RM E9L09)

WIRE CLOTH AS POROUS MATERIAL FOR TRANSPIRATION-COOLED WALLS. E. R. G. Eckert, Martin R. Kinsler, and Reeves P. Cochran. November 1951. 38p. diagrs., photos., tab. (NACA RM E51H23)

LAMINAR FREE CONVECTION ON A VERTICAL PLATE WITH PRESCRIBED NONUNIFORM WALL HEAT FLUX OR PRESCRIBED NONUNIFORM WALL TEMPERATURE. E. M. Sparrow. July 1955. 34p. diagrs. (NACA TN 3508)

EXPERIMENTAL INVESTIGATION OF AIR-FLOW UNIFORMITY AND PRESSURE LEVEL ON WIRE CLOTH FOR TRANSPIRATION-COOLING APPLICATIONS. Patrick L. Donoughe and Roy A. McKinnon. January 1956. 28p. diagrs., photos., tab. (NACA TN 3652. Supersedes RM E52E16)

(3.11)
Properties of Gases

THEORETICAL PERFORMANCE OF SOME ROCKET PROPELLANTS CONTAINING HYDROGEN, NITROGEN, AND OXYGEN. Riley O. Miller and Paul M. Ordin. May 26, 1948. 53p. diagrs., tabs. (NACA RM E8A30)

THERMODYNAMIC PROPERTIES OF GASEOUS NITROGEN. Harold W. Woolley, National Bureau of Standards. March 1956. 114p. diagrs., tabs. (NACA TN 3271)

GENERALIZED TABLES OF CORRECTIONS TO THERMODYNAMIC PROPERTIES FOR NONPOLAR GASES. Harold W. Woolley and William S. Benedict, National Bureau of Standards. March 1956. 62p. diagrs., tabs. (NACA TN 3272)

HEAT CAPACITY LAG OF GASEOUS MIXTURES. Thomas D. Rossing, Robert C. Amme, and Sam Legvold, Iowa State College. March 1956. 35p. diagrs., tabs. (NACA TN 3558)

(3.11.1)
KINETIC

THEORETICAL PERFORMANCE OF JP-4 FUEL AND LIQUID OXYGEN AS A ROCKET PROPELLANT. I - FROZEN COMPOSITION. Vearl N. Huff and Anthony Fortini. April 1956. 35p. diagrs., tabs. (NACA RM E56A27)

(3.11.2)
THERMODYNAMIC

PRELIMINARY EVALUATION OF THE AIR AND FUEL SPECIFIC-IMPULSE CHARACTERISTICS OF SEVERAL POTENTIAL RAM-JET FUELS. II - MAGNESIUM AND MAGNESIUM - OCTENE-1 SLURRIES. Benson E. Gammon. May 2, 1951. 15p. diagrs. (NACA RM E51C23)

PRELIMINARY EVALUATION OF THE AIR AND FUEL SPECIFIC-IMPULSE CHARACTERISTICS OF SEVERAL POTENTIAL RAM-JET FUELS. IV - HYDROGEN, α-METHYLNAPHTHALENE, AND CARBON. Benson E. Gammon. August 1951. 22p. diagrs. (NACA RM E51F05)

(3.12)
Accessories and Accessory Functions

(3.12.1)
FUEL SYSTEMS

AN EXPERIMENTAL COMPARISON OF THE LAGRANGIAN AND EULERIAN CORRELATION COEFFICIENTS IN HOMOGENEOUS ISOTROPIC TURBULENCE. William R. Mickelsen. October 1955. 42p. diagrs. (NACA TN 3570)

(3.12.1.4)
TURBOJET ENGINES

ANALOG STUDY OF INTERACTING AND NON-INTERACTING MULTIPLE-LOOP CONTROL SYSTEMS FOR TURBULENT ENGINES. George J. Pack and W. E. Phillips, Jr. 1955. ii, 13p. diagrs. (NACA Rept. 1212. Supersedes TN 3112)

(3.12.1.6)
PULSE-JET ENGINES

INVESTIGATION OF INTERNAL REGENERATIVE FUEL-HEATING SYSTEM FOR 20-INCH RAM JET. Sol Baker and Eugene Perchonok. September 1, 1949. 22p. diagrs., photos. (NACA RM E9F20)

FREE-FLIGHT PERFORMANCE OF 16-INCH-DIAMETER SUPERSONIC RAM-JET UNITS. I - FOUR UNITS DESIGNED FOR COMBUSTION-CHAMBER-INLET MACH NUMBER OF 0.12 AT FREE-STREAM MACH NUMBER OF 1.6 (UNITS A-2, A-3, A-4, AND A-5). William W. Carlton and Wesley E. Messing. September 22, 1949. 51p. diagrs., photos. (NACA RM E9F22)

(3.12.1.7)
RAM-JET ENGINES

INVESTIGATION OF INTERNAL REGENERATIVE FUEL-HEATING SYSTEM FOR 20-INCH RAM JET. Sol Baker and Eugene Perchonok. September 1, 1949. 22p. diagrs., photos. (NACA RM E9F20)

FREE-FLIGHT PERFORMANCE OF 16-INCH-DIAMETER SUPERSONIC RAM-JET UNITS. I - FOUR UNITS DESIGNED FOR COMBUSTION-CHAMBER-INLET MACH NUMBER OF 0.12 AT FREE-STREAM MACH NUMBER OF 1.6 (UNITS A-2, A-3, A-4, AND A-5). William W. Carlton and Wesley E. Messing. September 22, 1949. 51p. diagrs., photos. (NACA RM E9F22)

(3.12.1.8)
ROCKET ENGINES

IGNITION-DELAY CHARACTERISTICS IN MODIFIED OPEN-CUP APPARATUS OF SEVERAL FUELS WITH NITRIC ACID OXIDANTS WITHIN TEMPERATURE RANGE 70° TO -105° F. Riley O. Miller. December 1951. 30p. diagrs., 4 tabs. (NACA RM E51J11)

(3.12.2)
IGNITION SYSTEMS

EFFECT OF SPARK REPETITION RATE ON THE IGNITION LIMITS OF A SINGLE TUBULAR COMBUSTOR. Hampton H. Foster. December 1951. 12p. diagrs., tab. (NACA RM E51J18)

SPARK IGNITION OF FLOWING GASES. V - APPLICATION OF FUEL-AIR-RATIO AND INITIAL-TEMPERATURE DATA TO IGNITION THEORY. Clyde C. Swett, Jr. November 1955. 19p. diagrs. (NACA RM E55I16)

(3.12.3)
STARTING SYSTEMS

FREE-JET TESTS OF A 6.5-INCH-DIAMETER RAM-JET ENGINE AT MACH NUMBERS OF 1.81 AND 2.00. Maxime A. Faget, Raymond S. Watson, and Walter A. Bartlett, Jr. March 7, 1951. 38p. diagrs., photos. (NACA RM L50L06)

(3.13)
Vibration and Flutter

ROTATING-STALL CHARACTERISTICS OF A ROTOR WITH HIGH HUB-TIP RADIUS RATIO. Eleanor L. Costilow and Merle C. Huppert. August 1955. 59p. diagrs., photos. (NACA TN 3518)

STALL PROPAGATION IN AXIAL-FLOW COMPRESSORS. Alan H. Stenning, Anthony R. Kriebel, and Stephen R. Montgomery, Massachusetts Institute of Technology. June 1956. 83p. diagrs., photos., tab. (NACA TN 3580)

FLUTTER OF THIN PROPELLER BLADES, INCLUDING EFFECTS OF MACH NUMBER, STRUCTURAL DAMPING, AND VIBRATORY-STRESS MEASUREMENTS NEAR THE FLUTTER BOUNDARIES. Harvey H. Hubbard, Marvin F. Burgess, and Maurice A. Sylvester. June 1956. 25p. diagrs., tab. (NACA TN 3707)

(4)
AIRCRAFT LOADS AND CONSTRUCTION

(4.1) Loads

(4.1.1) AERODYNAMIC

AERODYNAMIC MEASUREMENTS MADE DURING NAVY INVESTIGATION OF HUMAN TOLERANCE TO WIND BLASTS. Donald L. Loving. March 11, 1947. 34p. diagrs., photos., 2 tabs. (NACA RM L7C25)

AERODYNAMIC INVESTIGATION OF A PARABOLIC BODY OF REVOLUTION AT MACH NUMBER OF 1.92 AND SOME EFFECTS OF AN ANNULAR JET EXHAUSTING FROM THE BASE. Eugene S. Love. February 8, 1950. 75p. diagrs., photos., tab. (NACA RM L9K09)

NOTES ON LOW-LIFT BUFFETING AND WING DROPPING AT MACH NUMBERS NEAR 1. Paul E. Purser. March 16, 1951. 22p. diagrs., tab. (NACA RM L51A30)

LOW-LIFT BUFFET CHARACTERISTICS OBTAINED FROM FLIGHT TESTS OF UNSWEPT THIN INTERSECTING SURFACES AND OF THICK 35° SWEPTBACK SURFACES. Homer P. Mason. January 1953. 21p. diagrs., photos. (NACA RM L52H12)

THE LATERAL CONTROL CHARACTERISTICS OF CONSTANT-PERCENT-CHORD TRAILING-EDGE ELEVONS ON A POINTED WING OF ASPECT RATIO 2 AT MACH NUMBERS UP TO 0.95. Verlin D. Reed and Donald W. Smith. August 1953. 105p. diagrs., photo., tabs. (NACA RM A53F03)

CALIBRATION OF STRAIN-GAGE INSTALLATIONS IN AIRCRAFT STRUCTURES FOR THE MEASUREMENT OF FLIGHT LOADS. T. H. Skopinski, William S. Aiken, Jr. and Wilber B. Huston. 1954. ii, 29p. diagrs., 10 tabs. (NACA Rept. 1178. Formerly TN 2993; RM L52G31)

MEASUREMENTS OF NORMAL-FORCE-COEFFICIENT FLUCTUATION ON FOUR 9-PERCENT-THICK AIRFOILS HAVING DIFFERENT LOCATIONS OF MAXIMUM THICKNESS. Milton D. Humphreys. April 1954. 21p. diagrs., photos. (NACA RM L54B22)

(4.1.1.1) WINGS

MEASUREMENTS OF THE CHORDWISE PRESSURE DISTRIBUTIONS OVER THE WING OF THE XS-1 RESEARCH AIRPLANE IN FLIGHT. De E. Beeler, Milton D. McLaughlin, and Dorothy C. Clift. August 4, 1948. 35p. diagrs., photo., tab. (NACA RM L8G21)

TABULATED PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS MEASURED ON THE WING OF THE BELL X-1 AIRPLANE IN PULL-UPS AT MACH NUMBERS FROM 0.53 TO 0.99. Ronald J. Knapp and Gertrude V. Wilken. November 1, 1950. 77p. diagrs., photo., 11 tabs. (NACA RM L50H28)

REVIEW OF SOME RECENT DATA ON BUFFET BOUNDARIES. Paul E. Purser and John A. Wyss. May 23, 1951. 11p. diagrs. (NACA RM L51E02a)

TABULATED PRESSURE COEFFICIENTS AND AERODYNAMIC CHARACTERISTICS MEASURED ON THE WING OF THE BELL X-1 AIRPLANE IN AN UNACCELERATED STALL AND IN PULL-UPS AT MACH NUMBERS OF 0.74, 0.75, 0.94, AND 0.97. Lawrence A. Smith. June 19, 1951. 49p. diagrs., photo., tabs. (NACA RM L51B23)

TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. ANALYSIS OF PRESSURE DISTRIBUTION OF WING-FUSELAGE CONFIGURATION HAVING A WING OF 45° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Donald L. Loving and Bruce B. Estabrooks. September 1951. 132p. diagrs., photos. (NACA RM L51F07)

A CORRELATION WITH FLIGHT TESTS OF RESULTS OBTAINED FROM THE MEASUREMENT OF WING PRESSURE DISTRIBUTIONS ON A 1/4-SCALE MODEL OF THE X-1 AIRPLANE (10-PERCENT-THICK WING). Jack F. Runckel and James H. Henderson. September 1952. 60p. diagrs., photos., tab. (NACA RM L52E29)

LONGITUDINAL FLIGHT CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 59° SWEEPBACK WITH MODIFIED WING ROOTS. James A. Martin. August 1953. 25p. diagrs., photos., tab. (NACA RM L53E28)

ON THE USE OF THE INDICIAL FUNCTION CONCEPT IN THE ANALYSIS OF UNSTEADY MOTIONS OF WINGS AND WING-TAIL COMBINATIONS. Murray Tobak. 1954. iii, 43p. diagrs. (NACA Rept. 1188)

A COMPARISON OF THE SPANWISE LOADING CALCULATED BY VARIOUS METHODS WITH EXPERIMENTAL LOADINGS OBTAINED ON A 45° SWEPTBACK WING OF ASPECT RATIO 8.02 AT A REYNOLDS NUMBER OF 4.0×10^6. William C. Schneider. 1954. ii, 11p. diagrs., tab. (NACA Rept. 1208. Supersedes RM L51G30)

DISTRIBUTION OF LIFT AND PITCHING MOMENT BETWEEN WING AND FUSELAGE AND EFFECTS OF WING FLEXIBILITY AND DIVE BRAKE ON A 1/30-SCALE SEMISPAN MODEL OF THE BELL X-5 AIRPLANE AT TRANSONIC SPEEDS AS DETERMINED BY THE NACA WING-FLOW METHOD. Garland J. Morris and Norman S. Silsby. March 1954. 46p. diagrs., photos., tab. (NACA RM L54A11)

A METHOD FOR THE DESIGN OF SWEPTBACK WINGS WARPED TO PRODUCE SPECIFIED FLIGHT CHARACTERISTICS AT SUPERSONIC SPEEDS. Warren A. Tucker. 1955. i, 17p. diagrs., tabs. (NACA Rept. 1226. Supersedes RM L51F08)

CALCULATED SPANWISE LIFT DISTRIBUTIONS, INFLUENCE FUNCTIONS, AND INFLUENCE COEFFICIENTS FOR UNSWEPT WINGS IN SUBSONIC FLOW. Franklin W. Diederich and Martin Zlotnick. 1955. ii, 69p. diagrs., tabs. (NACA Rept. 1228. Supersedes TN 3014)

CALCULATED SPANWISE LIFT DISTRIBUTIONS AND AERODYNAMIC INFLUENCE COEFFICIENTS FOR SWEPT WINGS IN SUBSONIC FLOW. Franklin W. Diederich and Martin Zlotnick. October 1955. 173p. diagrs., tabs. (NACA TN 3476)

FLOW STUDIES ON DROOPED-LEADING-EDGE DELTA WINGS AT SUPERSONIC SPEED. William H. Michael, Jr. January 1956. 29p. diagrs., photos. (NACA TN 3614)

PRELIMINARY FLIGHT SURVEY OF AERODYNAMIC NOISE ON AN AIRPLANE WING. Harold R. Mull and Joseph S. Algranti. March 1956. 8p. diagrs. (NACA RM E55K07)

A THEORETICAL STUDY OF THE AERODYNAMICS OF SLENDER CRUCIFORM-WING ARRANGEMENTS AND THEIR WAKES. John R. Spreiter and Alvin H. Sacks. March 1956. i, 67p. diagrs., photos., tabs. (NACA TN 3528)

(4.1.1.1.1) Steady Loads

AERODYNAMIC CHARACTERISTICS INCLUDING PRESSURE DISTRIBUTIONS OF A FUSELAGE AND THREE COMBINATIONS OF THE FUSELAGE WITH SWEPT-BACK WINGS AT HIGH SUBSONIC SPEEDS. Fred B. Sutton and Andrew Martin. February 6, 1951. 117p. diagrs., photos., tabs. (NACA RM A50J26a)

A COMPARISON OF THE EXPERIMENTAL AND THEORETICAL LOADING OVER TRIANGULAR WINGS IN SIDESLIP AT SUPERSONIC SPEEDS. John W. Boyd. May 18, 1951. 58p. diagrs., photo., tabs. (NACA RM A51C13)

THE EFFECTS OF REYNOLDS NUMBER AT MACH NUMBERS UP TO 0.94 ON THE LOADING ON A 35° SWEPTBACK WING HAVING NACA 65_1A012 STREAMWISE SECTIONS. Bruce E. Tinling and Armando E. Lopez. June 1952. 115p. diagrs., photos., tabs. (NACA RM A52B20)

CHORDWISE PRESSURE DISTRIBUTION AT HIGH SUBSONIC SPEEDS NEAR MIDSEMISPAN OF A TAPERED 35° SWEPTBACK WING OF ASPECT RATIO 4 HAVING NACA 65A006 AIRFOIL SECTIONS AND EQUIPPED WITH VARIOUS SPOILER AILERONS. Alexander D. Hammond and Barbara M. McMullan. June 1952. 76p. diagrs., tabs. (NACA RM L52C28)

INVESTIGATION OF THE EFFECT OF CHORDWISE POSITIONING AND SHAPE OF AN UNDERWING NACELLE ON THE HIGH-SPEED AERODYNAMIC CHARACTERISTICS OF A 45° SWEPTBACK TAPERED-IN-THICKNESS-RATIO WING OF ASPECT RATIO 6. H. Norman Silvers and Thomas J. King, Jr. January 1953. 50p. diagrs. (NACA RM L52K25)

PRESSURE DISTRIBUTION AT MACH NUMBERS UP TO 0.90 ON A CAMBERED AND TWISTED WING HAVING 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10, INCLUDING THE EFFECTS OF FENCES. Frederick W. Boltz and Harry H. Shibata. March 1953. 133p. diagrs., photos., tabs. (NACA RM A52K20)

THE EFFECT AT HIGH SUBSONIC SPEEDS OF A FLAP-TYPE AILERON ON THE CHORDWISE PRESSURE DISTRIBUTION NEAR MIDSEMISPAN OF A TAPERED 35° SWEPTBACK WING OF ASPECT RATIO 4 HAVING NACA 65A006 AIRFOIL SECTION. Alexander D. Hammond and Barbara M. Keffer. May 1953. 89p. diagrs., tab. (NACA RM L53C23)

CHORDWISE PRESSURES AND SECTION FORCE AND MOMENT COEFFICIENTS AT HIGH SUBSONIC SPEEDS NEAR MIDSPAN OF A TAPERED 35° SWEPTBACK WING WITH A FLAP-TYPE CONTROL AND AN ATTACHED TAB. Alexander D. Hammond and Barbara M. Keffer. March 1954. 57p. diagrs., 35 tabs. (NACA RM L54A22)

EFFECTS OF OPERATING PROPELLERS ON THE WING-SURFACE PRESSURES OF A FOUR-ENGINE TRACTOR AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK. Carl D. Kolbe and Frederick W. Boltz. April 1954. 133p. diagrs., photo., 19 tabs. (NACA RM A53L29)

THE EFFECT OF BLUNT-TRAILING-EDGE MODIFICATIONS ON THE HIGH-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A SWEPT-WING FIGHTER AIRPLANE. Melvin Sadoff, Frederick H. Matteson, and Rudolph D. Van Dyke, Jr. May 1954. 55p. diagrs., photos., tab. (NACA RM A54C31)

WING-LOAD MEASUREMENTS OF THE BELL X-5 RESEARCH AIRPLANE AT A SWEEP ANGLE OF 58.7°. Richard D. Banner, Robert D. Reed, and William L. Marcy. April 1955. 22p. diagrs., photo., tab. (NACA RM H55A11)

AERODYNAMICS OF A RECTANGULAR WING OF INFINITE ASPECT RATIO AT HIGH ANGLES OF ATTACK AND SUPERSONIC SPEEDS. John C. Martin and Frank S. Malvestuto, Jr. July 1955. 114p. diagrs., tab. (NACA TN 3421)

FLOW STUDIES ON FLAT-PLATE DELTA WINGS AT SUPERSONIC SPEED. William H. Michael, Jr. July 1955. 40p. diagrs., photos. (NACA TN 3472)

CORRECTION OF ADDITIONAL SPAN LOADINGS COMPUTED BY THE WEISSINGER SEVEN-POINT METHOD FOR MODERATELY TAPERED WINGS OF HIGH ASPECT RATIO. John DeYoung and Walter H. Barling, Jr. July 1955. 31p. diagrs. (NACA TN 3500)

THEORETICAL SPAN LOAD DISTRIBUTIONS AND ROLLING MOMENTS FOR SIDESLIPPING WINGS OF ARBITRARY PLAN FORM IN INCOMPRESSIBLE FLOW. M. J. Queijo. December 1955. 45p. diagrs. (NACA TN 3605)

(4.1.1.1.2) Maneuvering

EFFECT OF FORMATION POSITION ON LOAD FACTORS OBTAINED ON F2H AIRPLANES. Carl R. Huss and Harold A. Hamer. December 1951. 15p. diagrs., 3 tabs. (NACA RM L51I05)

TIME HISTORIES OF MANEUVERS PERFORMED WITH AN F-86A AIRPLANE DURING SQUADRON OPERATIONS. Harold A. Hamer and Campbell Henderson. February 1952. 90p. diagrs., 3 tabs. (NACA RM L51K30)

AILERON AND ELEVATOR HINGE MOMENTS OF THE BELL X-1 AIRPLANE MEASURED IN TRANSONIC FLIGHT. Hubert M. Drake and John B. McKay. June 1953. 27p. diagrs. (NACA RM L53E04)

WIND-TUNNEL INVESTIGATION OF THE EFFECTS OF STEADY ROLLING ON THE AERODYNAMIC LOADING CHARACTERISTICS OF A 45° SWEPTBACK WING AT HIGH SUBSONIC SPEEDS. James W. Wiggins and Richard E. Kuhn. November 1953. 22p. diagrs., photos. (NACA RM L53J01a)

ON THE USE OF THE INDICIAL FUNCTION CONCEPT IN THE ANALYSIS OF UNSTEADY MOTIONS OF WINGS AND WING-TAIL COMBINATIONS. Murray Tobak. 1954. iii, 43p. diagrs. (NACA Rept. 1188)

GENERALIZED INDICIAL FORCES ON DEFORMING RECTANGULAR WINGS IN SUPERSONIC FLIGHT. Harvard Lomax, Franklyn B. Fuller and Loma Sluder. 1955. ii, 27p. diagrs., tab. (NACA Rept. 1230. Supersedes TN 3286)

A FLIGHT EVALUATION OF THE LONGITUDINAL STABILITY CHARACTERISTICS ASSOCIATED WITH THE PITCH-UP OF A SWEPT-WING AIRPLANE IN MANEUVERING FLIGHT AT TRANSONIC SPEEDS. Seth B. Anderson and Richard S. Bray. 1955. ii, 12p. diagrs., photo., tab. (NACA Rept. 1237. Supersedes RM A51I12)

WING-LOAD MEASUREMENTS OF THE BELL X-5 RESEARCH AIRPLANE AT A SWEEP ANGLE OF 58.7°. Richard D. Banner, Robert D. Reed, and William L. Marcy. April 1955. 22p. diagrs., photo., tab. (NACA RM H55A11)

AERODYNAMICS OF A RECTANGULAR WING OF INFINITE ASPECT RATIO AT HIGH ANGLES OF ATTACK AND SUPERSONIC SPEEDS. John C. Martin and Frank S. Malvestuto, Jr. July 1955. 114p. diagrs., tab. (NACA TN 3421)

AN ANALYSIS OF ACCELERATION, AIRSPEED, AND GUST-VELOCITY DATA FROM ONE TYPE OF FOUR-ENGINE TRANSPORT AIRPLANE OPERATED OVER TWO DOMESTIC ROUTES. Martin R. Copp and Thomas L. Coleman. October 1955. 29p. diagrs., tabs. (NACA TN 3475)

A PRELIMINARY INVESTIGATION OF THE EFFECTS OF FREQUENCY AND AMPLITUDE ON THE ROLLING DERIVATIVES OF AN UNSWEPT-WING MODEL OSCILLATING IN ROLL. Lewis R. Fisher, Jacob H. Lichtenstein, and Katherine D. Williams. January 1956. 29p. diagrs., photos. (NACA TN 3554)

INTERIM REPORT ON FATIGUE CHARACTERISTICS OF A TYPICAL METAL WING. J. L. Kepert and A. O. Payne. March 1956. 80p. diagrs., photos., tabs. (NACA TM 1397. Originally issued as Report ARL/SM. 207, Aeronautical Research Laboratories, Australia)

(4.1.1.1.3) Gust Loads

THE VARIATION OF ATMOSPHERIC TURBULENCE WITH ALTITUDE AND ITS EFFECT ON AIRPLANE GUST LOADS. Robert L. McDougal, Thomas L. Coleman and Philip L. Smith. November 1953. 16p. diagrs., 2 tabs. (NACA RM L53G15a)

SOME DESIGN CONSIDERATIONS PERTINENT TO THE ROUGH-AIR BEHAVIOR OF AIRPLANES AT LOW ALTITUDE. Philip Donely and Clarence L. Gillis. November 1953. 21p. diagrs., tabs. (NACA RM L53J01b)

STRUCTURAL RESPONSE TO DISCRETE AND CONTINUOUS GUSTS OF AN AIRPLANE HAVING WING-BENDING FLEXIBILITY AND A CORRELATION OF CALCULATED AND FLIGHT RESULTS. John C. Houbolt and Eldon E. Kordes. 1954. ii, 22p. diagrs., 4 tabs. (NACA Rept. 1181. Formerly TN 3006)

A REVISED GUST-LOAD FORMULA AND A REEVALUATION OF V-G DATA TAKEN ON CIVIL TRANSPORT AIRPLANES FROM 1933 TO 1950. Kermit G. Pratt and Walter G. Walker. 1954. ii, 9p. diagrs., tabs. (NACA Rept. 1206. Supersedes TN 2964; TN 3041)

METEOROLOGICAL PROBLEMS ASSOCIATED WITH COMMERCIAL TUBOJET-AIRCRAFT OPERATION. A working group of the NACA Subcommittee on Meteorological Problems. June 1955. 46p. (NACA RM 54L29)

A REEVALUATION OF GUST-LOAD STATISTICS FOR APPLICATIONS IN SPECTRAL CALCULATIONS. Harry Press and May T. Meadows. August 1955. 19p. diagrs. (NACA TN 3540)

AN ANALYSIS OF ACCELERATION, AIRSPEED, AND GUST-VELOCITY DATA FROM A FOUR-ENGINE TRANSPORT AIRPLANE IN OPERATIONS ON AN EASTERN UNITED STATES ROUTE. Thomas L. Coleman and Mary W. Fetner. September 1955. 20p. diagrs., 3 tabs. (NACA TN 3483)

AN ANALYSIS OF ACCELERATION, AIRSPEED, AND GUST-VELOCITY DATA FROM ONE TYPE OF FOUR-ENGINE TRANSPORT AIRPLANE OPERATED OVER TWO DOMESTIC ROUTES. Martin R. Copp and Thomas L. Coleman. October 1955. 29p. diagrs., tabs. (NACA TN 3475)

SUMMARY OF DERIVED GUST VELOCITIES OBTAINED FROM MEASUREMENTS WITHIN THUNDERSTORMS. H(arold) B. Tolefson. October 1955. 19p. diagrs., tabs. (NACA TN 3538)

THE PROBLEM OF REDUCING THE SPEED OF A JET TRANSPORT IN FLIGHT. Don D. Davis, Jr. December 1955. 22p. diagrs. (NACA TN 3613)

GUST-LOAD AND AIRSPEED DATA FROM ONE TYPE OF TWO-ENGINE AIRPLANE ON SIX CIVIL AIRLINE ROUTES FROM 1947 TO 1955. Walter G. Walker. February 1956. 25p. diagrs., tabs. (NACA TN 3621)

SUMMARY OF LOCATIONS AND EXTENTS OF TURBULENT AREAS ENCOUNTERED DURING FLIGHT INVESTIGATIONS OF THE JET STREAM FROM OCTOBER 1953 TO MAY 1954 AND NOVEMBER 1954 TO JULY 1955. Mary W. Fetner. April 1956. 10p. tab. (NACA RM L55H04a)

APPROXIMATE INDICIAL LIFT FUNCTIONS FOR SEVERAL WINGS OF FINITE SPAN IN INCOMPRESSIBLE FLOW AS OBTAINED FROM OSCILLATORY LIFT COEFFICIENTS. Joseph A. Drischler. May 1956. 26p. diagrs., tab. (NACA TN 3639)

AN INVESTIGATION OF FORWARD-LOCATED FIXED SPOILERS AND DEFLECTORS AS GUST ALLEVIATORS ON AN UNSWEPT-WING MODEL. Delwin R. Croom, C. C. Shufflebarger, and Jarrett K. Huffman. June 1956. 26p. diagrs., photo. (NACA TN 3705)

(4.1.1.1.4) Buffeting Loads

MEASUREMENT AND ANALYSIS OF WING AND TAIL BUFFETING LOADS ON A FIGHTER AIRPLANE. Wilber B. Huston and T. H. Skopinski. 1955. i, 27p. diagrs., photo., tabs. (NACA Rept. 1219. Supersedes TN 3080)

MEASUREMENT OF AERODYNAMIC FORCES FOR VARIOUS MEAN ANGLES OF ATTACK ON AN AIRFOIL OSCILLATING IN PITCH AND ON TWO FINITE-SPAN WINGS OSCILLATING IN BENDING WITH EMPHASIS ON DAMPING IN THE STALL. A. Gerald Rainey. May 1956. i, 66p. diagrs., photo. (NACA TN 3643)

(4.1.1.2) TAIL

PRELIMINARY RESULTS OF HORIZONTAL-TAIL LOAD MEASUREMENTS OF THE BELL X-5 RESEARCH AIRPLANE. John T. Rogers and Angel H. Dunn. August 15, 1952. 22p. diagrs., photos., tabs. (NACA RM L52G14)

LONGITUDINAL FLIGHT CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 59° SWEEPBACK WITH MODIFIED WING ROOTS. James A. Martin. August 1953. 25p. diagrs., photos., tab. (NACA RM L53E28)

EFFECTS OF WING POSITION AND FUSELAGE SIZE ON THE LOW-SPEED STATIC AND ROLLING STABILITY CHARACTERISTICS OF A DELTA-WING MODEL. Alex Goodman and David F. Thomas, Jr. 1955. ii, 31p. diagrs., photos., tabs. (NACA Rept. 1224. Supersedes TN 3063)

VORTEX INTERFERENCE ON SLENDER AIRPLANES. Alvin H. Sacks. November 1955. 19p. diagr. (NACA TN 3525)

DETERMINATION OF VORTEX PATHS BY SERIES EXPANSION TECHNIQUE WITH APPLICATION TO CRUCIFORM WINGS. Alberta Y. Alksne. April 1956. 40p. diagrs., photos. (NACA TN 3670)

(4.1.1.2.1) Steady Loads

PRELIMINARY RESULTS OF HORIZONTAL-TAIL LOAD MEASUREMENTS OF THE BELL X-5 RESEARCH AIRPLANE. John T. Rogers and Angel H. Dunn. August 15, 1952. 22p. diagrs., photos., tabs. (NACA RM L52G14)

AN EXPERIMENTAL AND THEORETICAL INVESTIGATION AT HIGH SUBSONIC SPEEDS OF THE EFFECTS OF HORIZONTAL-TAIL HEIGHT ON THE AERODYNAMIC CHARACTERISTICS IN SIDESLIP OF AN UNSWEPT, UNTAPERED TAIL ASSEMBLY. Harleth G. Wiley and Donald R. Riley. December 1953. 71p. diagrs., tab. (NACA RM L53J19)

THE EFFECT OF BLUNT-TRAILING-EDGE MODIFICATIONS ON THE HIGH-SPEED STABILITY AND CONTROL CHARACTERISTICS OF A SWEPT-WING FIGHTER AIRPLANE. Melvin Sadoff, Frederick H. Matteson, and Rudolph D. Van Dyke, Jr. May 1954. 55p. diagrs., photos., tab. (NACA RM A54C31)

FLIGHT MEASUREMENTS OF HORIZONTAL-TAIL LOADS ON THE BELL X-5 RESEARCH AIRPLANE AT A SWEEP ANGLE OF 58.7°. Robert D. Reed. July 1955. 19p. diagrs., photo., tab. (NACA RM H55E20a)

(4.1.1.2.2) Maneuvering

EFFECT OF FORMATION POSITION ON LOAD FACTORS OBTAINED ON F2H AIRPLANES. Carl R. Huss and Harold A. Hamer. December 1951. 15p. diagrs., 3 tabs. (NACA RM L51I05)

TIME HISTORIES OF MANEUVERS PERFORMED WITH AN F-86A AIRPLANE DURING SQUADRON OPERATIONS. Harold A. Hamer and Campbell Henderson. February 1952. 90p. diagrs., 3 tabs. (NACA RM L51K30)

AILERON AND ELEVATOR HINGE MOMENTS OF THE BELL X-1 AIRPLANE MEASURED IN TRANSONIC FLIGHT. Hubert M. Drake and John B. McKay. June 1953. 27p. diagrs. (NACA RM L53E04)

A FLIGHT EVALUATION OF THE LONGITUDINAL STABILITY CHARACTERISTICS ASSOCIATED WITH THE PITCH-UP OF A SWEPT-WING AIRPLANE IN MANEUVERING FLIGHT AT TRANSONIC SPEEDS. Seth B. Anderson and Richard S. Bray. 1955. ii, 12p. diagrs., photo., tab. (NACA Rept. 1237. Supersedes RM A51I12)

ANALYSIS OF THE HORIZONTAL-TAIL LOADS MEASURED IN FLIGHT ON A MULTIENGINE JET BOMBER. William S. Aiken, Jr. and Bernard Wiener. September 1955. i, 69p. diagrs., photo., 6 tabs. (NACA TN 3479)

A PRELIMINARY INVESTIGATION OF THE EFFECTS OF FREQUENCY AND AMPLITUDE ON THE ROLLING DERIVATIVES OF AN UNSWEPT-WING MODEL OSCILLATING IN ROLL. Lewis R. Fisher, Jacob H. Lichtenstein, and Katherine D. Williams. January 1956. 29p. diagrs., photos. (NACA TN 3554)

(4.1.1.2.3) Buffeting and Gust

LOW-LIFT BUFFET CHARACTERISTICS OBTAINED FROM FLIGHT TESTS OF UNSWEPT THIN INTERSECTING SURFACES AND OF THICK 35° SWEPTBACK SURFACES. Homer P. Mason. January 1953. 21p. diagrs., photos. (NACA RM L52H12)

LONGITUDINAL FLIGHT CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 59° SWEEPBACK WITH MODIFIED WING ROOTS. James A. Martin. August 1953. 25p. diagrs., photos., tab. (NACA RM L53E28)

MEASUREMENTS OF NORMAL-FORCE-COEFFICIENT FLUCTUATION ON FOUR 9-PERCENT-THICK AIRFOILS HAVING DIFFERENT LOCATIONS OF MAXIMUM THICKNESS. Milton D. Humphreys. April 1954. 21p. diagrs., photos. (NACA RM L54B22)

FLIGHT DETERMINATION OF THE BUFFETING CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 58.7° SWEEPBACK. Donald W. Briggs. May 1954. 31p. diagrs., photo., tabs. (NACA RM L54C17)

MEASUREMENT AND ANALYSIS OF WING AND TAIL BUFFETING LOADS ON A FIGHTER AIRPLANE. Wilber B. Huston and T. H. Skopinski. 1955. i, 27p. diagrs., photo., tabs. (NACA Rept. 1219. Supersedes TN 3080)

(4.1.1.3) FUSELAGE, NACELLES, AND CANOPIES

AERODYNAMIC CHARACTERISTICS OF NACA RM-10 MISSILE IN 8- BY 6-FOOT SUPERSONIC WIND TUNNEL AT MACH NUMBERS FROM 1.49 TO 1.98. II - PRESENTATION AND ANALYSIS OF FORCE MEASUREMENTS. Fred T. Esenwein, Leonard J. Obery, and Carl F. Schueller. July 21, 1950. 34p diagrs., photo. (NACA RM E50D28)

AERODYNAMIC CHARACTERISTICS OF NACA RM-10 MISSILE IN 8- BY 6-FOOT SUPERSONIC WIND TUNNEL AT MACH NUMBERS FROM 1.49 TO 1.98. III - ANALYSIS OF FORCE DISTRIBUTION AT ANGLE OF ATTACK (STABILIZING FINS REMOVED). Roger W. Luidens and Paul C. Simon. December 12, 1950. 26p. diagrs. (NACA RM E50I19)

AERODYNAMIC CHARACTERISTICS INCLUDING PRESSURE DISTRIBUTIONS OF A FUSELAGE AND THREE COMBINATIONS OF THE FUSELAGE WITH SWEPT-BACK WINGS AT HIGH SUBSONIC SPEEDS. Fred B. Sutton and Andrew Martin. February 6, 1951. 117p. diagrs., photos., tabs. (NACA RM A50J26a)

AERODYNAMIC CHARACTERISTICS OF THE NACA RM-10 RESEARCH MISSILE IN THE AMES 1- BY 3-FOOT SUPERSONIC WIND TUNNEL NO. 2 - PRESSURE AND FORCE MEASUREMENTS AT MACH NUMBERS OF 1.52 AND 1.98. Edward W. Perkins, Forrest E. Gowen and Leland H. Jorgensen. September 1951. 37p. diagrs. (NACA RM A51G13)

TRANSONIC-WING INVESTIGATION IN THE LANGLEY 8-FOOT HIGH-SPEED TUNNEL AT HIGH SUBSONIC MACH NUMBERS AND AT A MACH NUMBER OF 1.2. ANALYSIS OF PRESSURE DISTRIBUTION OF WING-FUSELAGE CONFIGURATION HAVING A WING OF 45° SWEEPBACK, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTION. Donald L. Loving and Bruce B. Estabrooks. September 1951. 132p. diagrs., photos. (NACA RM L51F07)

INVESTIGATION OF THE EFFECT OF A NACELLE AT VARIOUS CHORDWISE AND VERTICAL POSITIONS ON THE AERODYNAMIC CHARACTERISTICS AT HIGH SUBSONIC SPEEDS OF A 45° SWEPTBACK WING WITH AND WITHOUT A FUSELAGE. H. Norman Silvers, Thomas J. King, Jr., and Thomas B. Pasteur, Jr. September 1951. 71p. diagrs., photos., 3 tabs. (NACA RM L51H16)

PRESSURE MEASUREMENTS ON A BODY OF REVOLUTION IN THE LANGLEY 16-FOOT TRANSONIC TUNNEL AND A COMPARISON WITH FREE-FALL DATA. Joseph M. Hallissy, Jr. March 1952. 19p. diagrs. (NACA RM L51L07a)

PRESSURE DISTRIBUTIONS AT MACH NUMBERS FROM 0.6 TO 1.9 MEASURED IN FREE FLIGHT ON A PARABOLIC BODY OF REVOLUTION WITH SHARPLY CONVERGENT AFTERBODY. William E. Stoney, Jr. April 1952. 34p. diagrs., photos. (NACA RM L51L03)

TRANSONIC DRAG CHARACTERISTICS AND PRESSURE DISTRIBUTION ON THE BODY OF A WING-BODY COMBINATION CONSISTING OF A BODY OF REVOLUTION OF FINENESS RATIO 12 AND A WING HAVING SWEEPBACK OF 45°, ASPECT RATIO 4, TAPER RATIO 0.6, AND NACA 65A006 AIRFOIL SECTIONS. Max C. Kurbjun and Jim Rogers Thompson. April 1952. 28p. diagrs., photo., tabs. (NACA RM L52B12)

AN ANALYSIS OF THE PRESSURE DISTRIBUTION MEASURED ON A BODY OF REVOLUTION AT TRANSONIC SPEEDS IN THE SLOTTED TEST SECTION OF THE LANGLEY 8-FOOT TRANSONIC TUNNEL. Bruce B. Estabrooks. June 1952. 42p. diagrs. (NACA RM L52D21a)

PRESSURE DISTRIBUTION AND PRESSURE DRAG FOR A HEMISPHERICAL NOSE AT MACH NUMBERS 2.05, 2.54, AND 3.04. Leo T. Chauvin. December 1952. 14p. diagrs., photos. (NACA RM L52K06)

PRESSURE AND FORCE CHARACTERISTICS AT TRANSONIC SPEEDS OF A SUBMERGED DIVERGENT-WALLED AIR INLET ON A BODY OF REVOLUTION. John A. Braden and P. Kenneth Pierpont. May 1953. 65p. photos., diagrs., tabs. (NACA RM L53C13)

DISTRIBUTION OF LIFT AND PITCHING MOMENT BETWEEN WING AND FUSELAGE AND EFFECTS OF WING FLEXIBILITY AND DIVE BRAKE ON A 1/30-SCALE SEMISPAN MODEL OF THE BELL X-5 AIRPLANE AT TRANSONIC SPEEDS AS DETERMINED BY THE NACA WING-FLOW METHOD. Garland J. Morris and Norman S. Silsby. March 1954. 46p. diagrs., photos., tab. (NACA RM L54A11)

SOME INTERNAL-FLOW CHARACTERISTICS AT ZERO FLIGHT SPEED OF AN ANNULAR SUPERSONIC INLET AND AN OPEN-NOSE INLET WITH SHARP AND ROUNDED LIPS. Joseph R. Mitillo. July 1954. 23p. diagrs., photo. (NACA RM L54E19)

COMPARISON OF EXPERIMENTAL AND THEORETICAL NORMAL-FORCE DISTRIBUTIONS (INCLUDING REYNOLDS NUMBER EFFECTS) ON AN OGIVE-CYLINDER BODY AT MACH NUMBER 1.98. Edward W. Perkins and Leland H. Jorgensen. May 1956. 50p. diagrs., tab. (NACA TN 3716. Supersedes RM A54H23)

(4.1.1.4) ROTATING WINGS

GUST-TUNNEL INVESTIGATION OF THE EFFECT OF A SHARP-EDGE GUST ON THE FLAPWISE BLADE BENDING MOMENTS OF A MODEL HELICOPTER ROTOR. Domenic J. Maglieri and Thomas D. Reisert. August 1955. 24p. diagrs., photos. (NACA TN 3470)

(4.1.1.5)
AEROELASTICITY

AERODYNAMIC CHARACTERISTICS INCLUDING PRESSURE DISTRIBUTIONS OF A FUSELAGE AND THREE COMBINATIONS OF THE FUSELAGE WITH SWEPT-BACK WINGS AT HIGH SUBSONIC SPEEDS. Fred B. Sutton and Andrew Martin. February 6, 1951. 117p. diagrs., photos., tabs. (NACA RM A50J26a)

EXPERIMENTAL INVESTIGATION OF THE OSCILLATING FORCES AND MOMENTS ON A TWO-DIMENSIONAL WING EQUIPPED WITH AN OSCILLATING CIRCULAR-ARC SPOILER. Sherman A. Clevenson and John E. Tomassoni. January 1954. 20p. diagrs., photos. (NACA RM L53K18)

DISTRIBUTION OF LIFT AND PITCHING MOMENT BETWEEN WING AND FUSELAGE AND EFFECTS OF WING FLEXIBILITY AND DIVE BRAKE ON A 1/30-SCALE SEMISPAN MODEL OF THE BELL X-5 AIRPLANE AT TRANSONIC SPEEDS AS DETERMINED BY THE NACA WING-FLOW METHOD. Garland J. Morris and Norman S. Silsby. March 1954. 46p. diagrs., photos., tab. (NACA RM L54A11)

COMPARISON BETWEEN THEORETICAL AND EXPERIMENTAL RATES OF ROLL OF TWO MODELS WITH FLEXIBLE RECTANGULAR WINGS AT SUPERSONIC SPEEDS. John M. Hedgepeth and Robert J. Kell. August 1954. 21p. diagrs., photo., tabs. (NACA RM L54F23)

MEASUREMENT AND ANALYSIS OF WING AND TAIL BUFFETING LOADS ON A FIGHTER AIRPLANE. Wilber B. Huston and T. H. Skopinski. 1955. i, 27p. diagrs., photo., tabs. (NACA Rept. 1219. Supersedes TN 3080)

GENERALIZED INDICIAL FORCES ON DEFORMING RECTANGULAR WINGS IN SUPERSONIC FLIGHT. Harvard Lomax, Franklyn B. Fuller and Loma Sluder. 1955. ii, 27p. diagrs., tab. (NACA Rept. 1230. Supersedes TN 3286)

PRELIMINARY STUDY OF SOME FACTORS WHICH AFFECT THE STALL-FLUTTER CHARACTERISTICS OF THIN WINGS. A. Gerald Rainey. March 1956. 33p. diagrs., photo., tab. (NACA TN 3622. Supersedes RM L52D08)

ON PANEL FLUTTER AND DIVERGENCE OF INFINITELY LONG UNSTIFFENED AND RING-STIFFENED THIN-WALLED CIRCULAR CYLINDERS. Robert W. Leonard and John M. Hedgepeth. April 1956. 52p. diagrs. (NACA TN 3638)

(4.1.2)
LANDING

(4.1.2.1)
IMPACT

STATISTICAL MEASUREMENTS OF CONTACT CONDITIONS OF 478 TRANSPORT-AIRPLANE LANDINGS DURING ROUTINE DAYTIME OPERATIONS. Norman S. Silsby. 1955. ii, 17p. diagrs., photos., tabs. (NACA Rept. 1214. Supersedes TN 3194)

COMPARISON OF LANDING-IMPACT VELOCITIES OF FIRST AND SECOND WHEEL TO CONTACT FROM STATISTICAL MEASUREMENTS OF TRANSPORT AIRPLANE LANDINGS. Eziaslav N. Harrin. February 1956. 22p. diagrs., photo., tabs. (NACA TN 3610)

(4.1.2.1.1)
Land

VERTICAL AND DRAG GROUND-REACTION FORCES DEVELOPED IN LANDING IMPACTS OF A LARGE AIRPLANE. Richard H. Sawyer, Albert W. Hall and James M. McKay. June 1955. 12p. diagrs. (NACA RM L55E12c)

EFFECT OF INTERACTION ON LANDING-GEAR BEHAVIOR AND DYNAMIC LOADS IN A FLEXIBLE AIRPLANE STRUCTURE. Francis E. Cook and Benjamin Milwitzky. August 1955. 75p. diagrs., 2 tabs. (NACA TN 3467)

FRICTION STUDY OF AIRCRAFT TIRE MATERIAL ON CONCRETE. W. G. Hample, Boeing Airplane Company. September 1955. 34p. diagrs., photos. (NACA TN 3294)

A METHOD FOR OBTAINING STATISTICAL DATA ON AIRPLANE VERTICAL VELOCITY AT GROUND CONTACT FROM MEASUREMENTS OF CENTER-OF-GRAVITY ACCELERATION. Robert C. Dreher. February 1956. 21p. diagrs., photo., tabs. (NACA TN 3541)

(4.1.2.1.2)
Water

WATER LANDING INVESTIGATION OF A HYDRO-SKI MODEL AT BEAM LOADINGS OF 18.9 AND 4.4. Sidney A. Batterson. September 1951. 54p. diagrs., photos., tab. (NACA RM L51F27)

ESTIMATION OF WATER LANDING LOADS ON HYDRO-SKI-EQUIPPED AIRCRAFT. Emanuel Schnitzer. July 1953. 14p. diagrs. (NACA RM L53D29)

(4.1.2.2) GROUND-RUN

EFFECT OF CARRIAGE MASS UPON THE LOADS AND MOTIONS OF A PRISMATIC BODY DURING HYDRODYNAMIC IMPACT. Melvin F. Markey. March 1956. 45p. diagrs. (NACA TN 3619)

ON SPECTRAL ANALYSIS OF RUNWAY ROUGHNESS AND LOADS DEVELOPED DURING TAXIING. John C. Houbolt, James H. Walls and Robert F. Smiley. July 1955. 9p. diagrs. (NACA TN 3484)

PRELIMINARY PERFORMANCE DATA OF SEVERAL TAIL-PIPE-CASCADE-TYPE MODEL THRUST REVERSERS. James G. Henzel, Jr. and Jack G. McArdle. August 1955. 48p. diagrs., photos., tab. (NACA RM E55F09)

(4.1.2.2.1) Land

REDUCTION OF THE SHIMMY TENDENCY OF TAIL AND NOSE-WHEEL LANDING GEARS BY INSTALLATION OF SPECIALLY DESIGNED TIRES. (Verminderung der Flatterneigung von Sporn- und Bugwerken durch Einbau besonders geformter Reifen). H. Schrode. July 1955. 13p. diagrs. (NACA TM 1391. Trans. from Deutschen Versuchsanstalt für Luftfahrt E. V., Berlin-Adlershof. Technische Berichte, v. 10, 1943, p. 113-116)

FRICTION STUDY OF AIRCRAFT TIRE MATERIAL ON CONCRETE. W. G. Hample, Boeing Airplane Company. September 1955. 34p. diagrs., photos. (NACA TN 3294)

LOW-SPEED YAWED-ROLLING CHARACTERISTICS AND OTHER ELASTIC PROPERTIES OF A PAIR OF 26-INCH-DIAMETER, 12-PLY-RATING, TYPE VII AIRCRAFT TIRES. Walter B. Horne, Robert F. Smiley, and Bertrand H. Stephenson. May 1956. 98p. diagrs., photos., tabs. (NACA TN 3604)

CORRELATION, EVALUATION, AND EXTENSION OF LINEARIZED THEORIES FOR TIRE MOTION AND WHEEL SHIMMY. Robert F. Smiley. June 1956. iv, 139p. diagrs., tab. (NACA TN 3632)

(4.1.2.2.2) Water

PRELIMINARY INVESTIGATION OF SELF-EXCITED VIBRATIONS OF SINGLE PLANING SURFACES. Elmo J. Mottard. June 1956. 19p. diagrs., photos., tab. (NACA TN 3698. Supersedes RM L55J27)

(4.2)
Vibration and Flutter

PRELIMINARY FLIGHT INVESTIGATION OF THE MANEUVERING ACCELERATIONS AND BUFFET BOUNDARY OF A 35° SWEPT-WING AIRPLANE AT HIGH ALTITUDE AND TRANSONIC SPEEDS. George A. Rathert, Jr., Howard L. Ziff, and George E. Cooper. February 21, 1951. 12p. diagrs., photo., tab. (NACA RM A50L04)

SOME EXPERIMENTS ON THE FLUTTER OF SWEPTBACK CANTILEVER WING MODELS AT MACH NUMBER 1.3. W. J. Tuovila. March 15, 1951. 10p. diagrs., tab. (NACA RM L51A11)

NOTES ON LOW-LIFT BUFFETING AND WING DROPPING AT MACH NUMBERS NEAR 1. Paul E. Purser. March 16, 1951. 22p. diagrs., tab. (NACA RM L51A30)

REVIEW OF SOME RECENT DATA ON BUFFET BOUNDARIES. Paul E. Purser and John A. Wyss. May 23, 1951. 11p. diagrs. (NACA RM L51E02a)

SOME WIND-TUNNEL RESULTS OF AN INVESTIGATION OF THE FLUTTER OF SWEPTBACK AND TRIANGULAR-WING MODELS AT MACH NUMBER 1.3. W. J. Tuovila. May 1952. 12p. diagrs., tab. (NACA RM L52C13)

SOME EXPERIMENTAL STUDIES OF PANEL FLUTTER AT MACH NUMBER 1.3. Maurice A. Sylvester and John E. Baker. December 1952. 25p. diagrs., photos., tab. (NACA RM L52I16)

LOW-LIFT BUFFET CHARACTERISTICS OBTAINED FROM FLIGHT TESTS OF UNSWEPT THIN INTERSECTING SURFACES AND OF THICK 35° SWEPTBACK SURFACES. Homer P. Mason. January 1953. 21p. diagrs., photos. (NACA RM L52H12)

SUPERSONIC FLOW PAST OSCILLATING AIRFOILS INCLUDING NONLINEAR THICKNESS EFFECTS. Milton D. Van Dyke. 1954. ii, 17p. diagrs. (NACA Rept. 1183. Formerly TN 2982)

EXPERIMENTAL INVESTIGATION OF THE OSCILLATING FORCES AND MOMENTS ON A TWO-DIMENSIONAL WING EQUIPPED WITH AN OSCILLATING CIRCULAR-ARC SPOILER. Sherman A. Clevenson and John E. Tomassoni. January 1954. 20p. diagrs., photos. (NACA RM L53K18)

SUMMARY OF RECENT THEORETICAL AND EXPERIMENTAL WORK ON BOX-BEAM VIBRATIONS. John M. Hedgepeth. June 1955. 10p. diagrs., photo., 2 tabs. (NACA RM L55E09a)

BEHAVIOR OF A CANTILEVER PLATE UNDER RAPID-HEATING CONDITIONS. Louis F. Vosteen and Kenneth E. Fuller. July 1955. 17p. diagrs. (NACA RM L55E20c)

SOME EFFECTS OF FLUID IN PYLON-MOUNTED TANKS ON FLUTTER. James R. Reese. July 1955. 7p. diagrs., tab. (NACA RM L55F10)

THEORETICAL INVESTIGATION OF FLUTTER OF TWO-DIMENSIONAL FLAT PANELS WITH ONE SURFACE EXPOSED TO SUPERSONIC POTENTIAL FLOW. Herbert C. Nelson and Herbert J. Cunningham. July 1955. 60p. diagrs., tab. (NACA TN 3465)

INVESTIGATION OF THE VIBRATIONS OF A HOLLOW THIN-WALLED RECTANGULAR BEAM. Eldon E. Kordes and Edwin T. Kruszewski. October 1955. 24p. diagrs., photos., 2 tabs. (NACA TN 3463)

INFLUENCE OF SHEAR DEFORMATION ON THE CROSS SECTION ON TORSIONAL FREQUENCIES OF BOX BEAMS. Edwin T. Kruszewski and William W. Davenport. October 1955. 23p. diagrs. (NACA TN 3464)

TABULATION OF THE f_λ FUNCTIONS WHICH OCCUR IN THE AERODYNAMIC THEORY OF OSCILLATING WINGS IN SUPERSONIC FLOW. Vera Huckel. February 1956. 59p. tab. (NACA TN 3606)

EXPERIMENTAL INVESTIGATION OF THE VIBRATIONS OF A BUILT-UP RECTANGULAR BOX BEAM. Eldon E. Kordes and Edwin T. Kruszewski. February 1956. 28p. diagrs., photos., tabs. (NACA TN 3618)

THE ACCURACY OF THE SUBSTITUTE-STRINGER APPROACH FOR DETERMINING THE BENDING FREQUENCIES OF MULTISTRINGER BOX BEAMS. William W. Davenport. April 1956. 28p. diagrs., tab. (NACA TN 3636)

INFLUENCE OF LARGE AMPLITUDES ON FLEXURAL MOTIONS OF ELASTIC PLATES. George Herrmann, Columbia University. May 1956. 45p. diagrs. (NACA TN 3578)

MEASUREMENT OF AERODYNAMIC FORCES FOR VARIOUS MEAN ANGLES OF ATTACK ON AN AIRFOIL OSCILLATING IN PITCH AND ON TWO FINITE-SPAN WINGS OSCILLATING IN BENDING WITH EMPHASIS ON DAMPING IN THE STALL. A. Gerald Rainey. May 1956. i, 66p. diagrs., photo. (NACA TN 3643)

EXPERIMENTAL MEASUREMENTS OF FORCES AND MOMENTS ON A TWO-DIMENSIONAL OSCILLATING WING AT SUBSONIC SPEEDS. Sherman A. Clevenson and Edward Widmayer, Jr. June 1956. 28p. diagrs., tab. (NACA TN 3686. Supersedes RM L9K28a)

(4.2.1)
WINGS AND AILERONS

RESULTS OF TWO FREE-FALL EXPERIMENTS ON FLUTTER OF THIN UNSWEPT WINGS IN THE TRANSONIC SPEED RANGE. William T. Lauten, Jr., and Herbert C. Nelson. May 8, 1951. 26p. diagrs., photo., tabs. (NACA RM L51C08)

RECENT EXPERIMENTAL FLUTTER STUDIES. Arthur A. Regier and Dennis J. Martin. June 12, 1951. 18p. diagrs. (NACA RM L51F11)

SUMMARY OF FLUTTER EXPERIENCES AS A GUIDE TO THE PRELIMINARY DESIGN OF LIFTING SURFACES ON MISSILES. Dennis J. Martin. November 1951. 16p. diagrs. (NACA RM L51J30)

A PRELIMINARY WIND-TUNNEL INVESTIGATION OF FLUTTER CHARACTERISTICS OF DELTA WINGS. Robert W. Herr. April 1952. 35p. diagrs., tabs. (NACA RM L52B14a)

RESULTS OF TWO EXPERIMENTS ON FLUTTER OF HIGH-ASPECT-RATIO SWEPT WINGS IN THE TRANSONIC SPEED RANGE. W. T. Lauten, Jr., and Burke R. O'Kelly. July 1952. 22p. diagrs., photos., tabs. (NACA RM L52D24b)

FREE-FLIGHT INVESTIGATION AT ZERO LIFT IN THE MACH NUMBER RANGE BETWEEN 0.7 AND 1.4 TO DETERMINE THE EFFECTIVENESS OF AN INSET TAB AS A MEANS OF AERODYNAMICALLY RELIEVING AILERON HINGE MOMENTS. William M. Bland, Jr., and Edward T. Marley. January 1953. 19p. diagrs., photos. (NACA RM L52K07)

PRELIMINARY RESULTS OF SUPERSONIC-JET TESTS OF SIMPLIFIED WING STRUCTURES. Richard R. Heldenfels and Richard Rosecrans. July 1953. 19p. diagrs., photos. (NACA RM L53E26a)

TEST OF AN AERODYNAMICALLY HEATED MULTIWEB WING STRUCTURE (MW-1) IN A FREE JET AT MACH NUMBER 2. Richard R. Heldenfels, Richard Rosecrans, and George E. Griffith. July 1953. 37p. diagrs., photos. (NACA RM L53E27)

FLIGHT DETERMINATION OF THE BUFFETING CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 58.7° SWEEPBACK. Donald W. Briggs. May 1954. 31p. diagrs., photo., tabs. (NACA RM L54C17)

MEASUREMENT AND ANALYSIS OF WING AND TAIL BUFFETING LOADS ON A FIGHTER AIRPLANE. Wilber B. Huston and T. H. Skopinski. 1955. i, 27p. diagrs., photo., tabs. (NACA Rept. 1219. Supersedes TN 3080)

GENERALIZED INDICIAL FORCES ON DEFORMING RECTANGULAR WINGS IN SUPERSONIC FLIGHT. Harvard Lomax, Franklyn B. Fuller and Loma Sluder. 1955. ii, 27p. diagrs., tab. (NACA Rept. 1230. Supersedes TN 3286)

THEORETICAL AND EXPERIMENTAL INVESTIGATION OF THE EFFECT OF TUNNEL WALLS ON THE FORCES ON AN OSCILLATING AIRFOIL IN TWO-DIMENSIONAL SUBSONIC COMPRESSIBLE FLOW. Harry L. Runyan, Donald S. Woolston and A. Gerald Rainey. June 1955. 41p. diagrs., photo. (NACA TN 3416. Supersedes and extends RM L52I17a)

SOME EFFECTS OF FLUID IN PYLON-MOUNTED TANKS ON FLUTTER. James R. Reese. July 1955. 7p. diagrs., tab. (NACA RM L55F10)

SOME EFFECTS OF SYSTEM NONLINEARITIES IN THE PROBLEM OF AIRCRAFT FLUTTER. Donald S. Woolston, Harry L. Runyan, and Thomas A. Byrdsong. October 1955. 20p. diagrs., tabs. (NACA TN 3539)

PRELIMINARY STUDY OF SOME FACTORS WHICH AFFECT THE STALL-FLUTTER CHARACTERISTICS OF THIN WINGS. A. Gerald Rainey. March 1956. 33p. diagrs., photo., tab. (NACA TN 3622. Supersedes RM L52D08)

SOME WIND-TUNNEL EXPERIMENTS ON SINGLE-DEGREE-OF-FREEDOM FLUTTER OF AILERONS IN THE HIGH SUBSONIC SPEED RANGE. Sherman A. Clevenson. June 1956. 32p. diagrs., photo., tabs. (NACA TN 3687. Supersedes RM L9B08)

(4.2.2)
TAILS

FLIGHT DETERMINATION OF THE BUFFETING CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 58.7° SWEEPBACK. Donald W. Briggs. May 1954. 31p. diagrs., photo., tabs. (NACA RM L54C17)

MEASUREMENT AND ANALYSIS OF WING AND TAIL BUFFETING LOADS ON A FIGHTER AIRPLANE. Wilber B. Huston and T. H. Skopinski. 1955. i, 27p. diagrs., photo., tabs. (NACA Rept. 1219. Supersedes TN 3080)

(4. 2. 2. 1)
ELEVATORS AND RUDDERS

SOME EFFECTS OF SYSTEM NONLINEARITIES IN THE PROBLEM OF AIRCRAFT FLUTTER. Donald S. Woolston, Harry L. Runyan, and Thomas A. Byrdsong. October 1955. 20p. diagrs., tabs. (NACA TN 3539)

(4.2.3)
BODIES

RECENT EXPERIMENTAL FLUTTER STUDIES. Arthur A. Regier and Dennis J. Martin. June 12, 1951. 18p. diagrs. (NACA RM L51F11)

SUMMARY OF FLUTTER EXPERIENCES AS A GUIDE TO THE PRELIMINARY DESIGN OF LIFTING SURFACES ON MISSILES. Dennis J. Martin. November 1951. 16p. diagrs. (NACA RM L51J30)

AN AIR-FLOW-DIRECTION PICKUP SUITABLE FOR TELEMETERING USE ON PILOTLESS AIRCRAFT. Wallace L. Ikard. March 1954. 25p. diagrs., photos. (NACA RM L53K16)

SOME EFFECTS OF FLUID IN PYLON-MOUNTED TANKS ON FLUTTER. James R. Reese. July 1955. 7p. diagrs., tab. (NACA RM L55F10)

(4.2.4) PROPELLER, FANS, AND COMPRESSORS

PRELIMINARY INVESTIGATION OF FLOW FLUCTUATIONS DURING SURGE AND BLADE ROW STALL IN AXIAL-FLOW COMPRESSORS. Merle C Huppert. August 1952. 52p. diagrs., photos. (NACA RM E52E28)

THE EFFECTS OF COMPRESSIBILITY ON THE UPWASH AT THE PROPELLER PLANES OF A FOUR-ENGINE TRACTOR AIRPLANE CONFIGURATION HAVING A WING WITH 40° OF SWEEPBACK AND AN ASPECT RATIO OF 10. Armando E. Lopez and Jerald K. Dickson. April 1953. 38p. diagrs., photos., tab. (NACA RM A53A30a)

THE EFFECT OF BLADE-SECTION CAMBER ON THE STALL-FLUTTER CHARACTERISTICS OF THREE NACA PROPELLERS AT ZERO ADVANCE. Arthur E. Allis and John M. Swihart. April 1953. 29p. diagrs., photo., tab. (NACA RM L53B17)

A WIND-TUNNEL INVESTIGATION OF THE EFFECTS OF THRUST-AXIS INCLINATION ON PROPELLER FIRST-ORDER VIBRATION. W. H. Gray, J. M. Hallissy, Jr., and A. R. Heath, Jr. 1954. ii, 37p. diagrs., photo., tab. (NACA Rept. 1205. Supersedes RM L50D13)

VIBRATORY-STRESS INVESTIGATION OF SIX- AND EIGHT-BLADE DUAL-ROTATING PROPELLERS OPERATING AT ZERO ADVANCE. Atwood R. Heath, Jr. and Robert L. O'Neal. February 1955. 26p. diagrs., photo., tabs. (NACA RM L54J28)

PRELIMINARY STUDY OF SOME FACTORS WHICH AFFECT THE STALL-FLUTTER CHARACTERISTICS OF THIN WINGS. A. Gerald Rainey. March 1956. 33p. diagrs., photo., tab. (NACA TN 3622. Supersedes RM L52D08)

FLUTTER OF THIN PROPELLER BLADES, INCLUDING EFFECTS OF MACH NUMBER, STRUCTURAL DAMPING, AND VIBRATORY-STRESS MEASUREMENTS NEAR THE FLUTTER BOUNDARIES. Harvey H. Hubbard, Marvin F. Burgess, and Maurice A. Sylvester. June 1956. 25p. diagrs., tab. (NACA TN 3707)

(4.2.5) ROTATING-WING AIRCRAFT

SIMPLIFIED PROCEDURES AND CHARTS FOR THE RAPID ESTIMATION OF BENDING FREQUENCIES OF ROTATING BEAMS. Robert T. Yntema. June 1955. ii, 90p. diagrs., 6 tabs. (NACA TN 3459. Supersedes and extends RM L54G02)

GUST-TUNNEL INVESTIGATION OF THE EFFECT OF A SHARP-EDGE GUST ON THE FLAPWISE BLADE BENDING MOMENTS OF A MODEL HELICOPTER ROTOR. Domenic J. Maglieri and Thomas D. Reisert. August 1955. 24p. diagrs., photos. (NACA TN 3470)

(4.2.6) PANELS AND SURFACE COVERINGS

ON PANEL FLUTTER AND DIVERGENCE OF INFINITELY LONG UNSTIFFENED AND RING-STIFFENED THIN-WALLED CIRCULAR CYLINDERS. Robert W. Leonard and John M. Hedgepeth. April 1956. 52p. diagrs. (NACA TN 3638)

(4.3)
Structures

PRELIMINARY RESULTS OF SUPERSONIC-JET TESTS OF SIMPLIFIED WING STRUCTURES. Richard R. Heldenfels and Richard Rosecrans. July 1953. 19p. diagrs., photos. (NACA RM L53E26a)

TEST OF AN AERODYNAMICALLY HEATED MULTIWEB WING STRUCTURE (MW-1) IN A FREE JET AT MACH NUMBER 2. Richard R. Heldenfels, Richard Rosecrans, and George E. Griffith. July 1953. 37p. diagrs., photos. (NACA RM L53E27)

TRANSIENT TEMPERATURE DISTRIBUTION IN AN AERODYNAMICALLY HEATED MULTIWEB WING. George E. Griffith. July 1953. 10p. diagrs. (NACA RM L53E27a)

(4.3.1)
COLUMNS

DEVELOPMENT OF EQUIPMENT AND OF EXPERIMENTAL TECHNIQUES FOR COLUMN CREEP TESTS. Sharad A. Patel, Martin Bloom, Burton Erickson, Alexander Chwick and N(icholas) J(oh n) Hoff, Polytechnic Institute of Brooklyn. September 1955. 20p. diagrs., photos., tab. (NACA TN 3493)

A UNIVERSAL COLUMN FORMULA FOR LOAD AT WHICH YIELDING STARTS. L. H. Donnell and V. C. Tsien, Illinois Institute of Technology. October 1955. 48p. diagrs., photos., tab. (NACA TN 3415)

CORRELATION OF CREEP-BUCKLING TESTS WITH THEORY. Sharad A. Patel, Joseph Kempner, Burton Erickson, and Abol H. Mobassery, Polytechnic Institute of Brooklyn. May 1956. 39p. diagrs., photos., tabs. (NACA RM 56C20)

(4.3.3)
PLATES

STRESSES AND DEFLECTIONS OF A SWEPT BIPLANE WING. George W. Zender and John E. Duberg. August 1954. 41p. diagrs., photo., tabs. (NACA RM L54E03a)

INVESTIGATION OF THE COMPRESSIVE STRENGTH AND CREEP LIFETIME OF 2024-T3 ALUMINUM-ALLOY PLATES AT ELEVATED TEMPERATURES. Eldon E. Mathauser and William D. Deveikis. January 1956. 40p. diagrs., photos., tabs. (NACA TN 3552. Supersedes RM L55E11b)

COMPRESSIVE CRIPPLING OF STRUCTURAL SECTIONS. Melvin S. Anderson. January 1956. 31p. diagrs., tabs. (NACA TN 3553)

A METHOD FOR DEFLECTION ANALYSIS OF THIN LOW-ASPECT-RATIO WINGS. Manuel Stein and J. Lyell Sanders, Jr. June 1956. 65p. diagrs. (NACA TN 3640)

(4.3.3.1)
FLAT

DEVELOPMENT OF EQUIPMENT AND OF EXPERIMENTAL TECHNIQUES FOR COLUMN CREEP TESTS. Sharad A. Patel, Martin Bloom, Burton Erickson, Alexander Chwick and N(icholas) J(oh n) Hoff, Polytechnic Institute of Brooklyn. September 1955. 20p. diagrs., photos., tab. (NACA TN 3493)

ANALYSIS OF STRESSES IN THE PLASTIC RANGE AROUND A CIRCULAR HOLE IN A PLATE SUBJECTED TO UNIAXIAL TENSION. Bernard Budiansky and Robert J. Vidensek. October 1955. 39p. diagrs., tabs. (NACA TN 3542)

ON THE BUCKLING OF BARS AND PLATES IN THE PLASTIC RANGE. PART II. (Over het knikvraagstuk in het plastische gebied bij staven en platen. (Deel)). J. P. Benthem. March 1956. 79p. diagrs., tabs. (NACA TM 1392. Trans. of Nationaal Luchtvaartlaboratorium, Amsterdam, Rapport S. 423, Jan. 1954)

(4.3.3.1.1)
Unstiffened

BEHAVIOR OF A CANTILEVER PLATE UNDER RAPID-HEATING CONDITIONS. Louis F. Vosteen and Kenneth E. Fuller. July 1955. 17p. diagrs. (NACA RM L55E20c)

CORRELATION OF CRIPPLING STRENGTH OF PLATE STRUCTURES WITH MATERIAL PROPERTIES. Roger A. Anderson and Melvin S. Anderson. January 1956. 50p. diagrs., tabs. (NACA TN 3600)

INFLUENCE OF LARGE AMPLITUDES ON FLEXURAL MOTIONS OF ELASTIC PLATES. George Herrmann, Columbia University. May 1956. 45p. diagrs. (NACA TN 3578)

(4.3.3.1.2)
Stiffened

FORMULAS FOR THE ELASTIC CONSTANTS OF PLATES WITH INTEGRAL WAFFLE-LIKE STIFFENING. Norris F. Dow, Charles Libove, and Ralph E. Hubka. 1954. ii, 24p. diagrs., tab. (NACA Rept. 1195. Supersedes RM L53E13a)

CHARTS RELATING THE COMPRESSIVE BUCKLING STRESS OF LONGITUDINALLY SUPPORTED PLATES TO THE EFFECTIVE DEFLECTIONAL AND ROTATIONAL STIFFNESS OF THE SUPPORTS. Roger A. Anderson and Joseph W. Semonian. 1954. ii, 19p. diagrs., tabs. (NACA Rept. 1202. Supersedes TN 2987)

SHEARING EFFECTIVENESS OF INTEGRAL STIFFENING. Robert F. Crawford and Charles Libove. June 1955. 37p. diagrs., photo., tab. (NACA TN 3443)

CORRELATION OF CRIPPLING STRENGTH OF PLATE STRUCTURES WITH MATERIAL PROPERTIES. Roger A. Anderson and Melvin S. Anderson. January 1956. 50p. diagrs., tabs. (NACA TN 3600)

A THEORY FOR THE ELASTIC DEFLECTIONS OF PLATES INTEGRALLY STIFFENED ON ONE SIDE. Robert F. Crawford. April 1956. 21p. diagrs. (NACA TN 3646)

INVESTIGATION OF THE COMPRESSIVE STRENGTH AND CREEP LIFETIME OF 2024-T ALUMINUM-ALLOY SKIN-STRINGER PANELS AT ELEVATED TEMPERATURES. Eldon E. Mathauser and William D. Deveikis. May 1956. 29p. diagrs., photos., tabs. (NACA TN 3647)

SOME EFFECTS OF JOINT CONDUCTIVITY ON THE TEMPERATURES AND THERMAL STRESSES IN AERODYNAMICALLY HEATED SKIN-STIFFENER COMBINATIONS. George E. Griffith and Georgene H. Miltonberger. June 1956. 62p. diagrs. (NACA TN 3699)

(4.3.4) BEAMS

STRESSES AND DEFLECTIONS OF A SWEPT BIPLANE WING. George W. Zender and John E. Duberg. August 1954. 41p. diagrs., photo., tabs. (NACA RM L54E03a)

SIMPLIFIED PROCEDURES AND CHARTS FOR THE RAPID ESTIMATION OF BENDING FREQUENCIES OF ROTATING BEAMS. Robert T. Yntema. June 1955. ii, 90p. diagrs., 6 tabs. (NACA TN 3459. Supersedes and extends RM L54G02)

INVESTIGATION OF THE VIBRATIONS OF A HOLLOW THIN-WALLED RECTANGULAR BEAM. Eldon E. Kordes and Edwin T. Kruszewski. October 1955. 24p. diagrs., photos., 2 tabs. (NACA TN 3463)

(4. 3. 4. 1) BOX

CHARTS RELATING THE COMPRESSIVE BUCKLING STRESS OF LONGITUDINALLY SUPPORTED PLATES TO THE EFFECTIVE DEFLECTIONAL AND ROTATIONAL STIFFNESS OF THE SUPPORTS. Roger A. Anderson and Joseph W. Semonian. 1954. ii, 19p. diagrs., tabs. (NACA Rept. 1202. Supersedes TN 2987)

SUMMARY OF RECENT THEORETICAL AND EXPERIMENTAL WORK ON BOX-BEAM VIBRATIONS. John M. Hedgepeth. June 1955. 10p. diagrs., photo., 2 tabs. (NACA RM L55E09a)

EXPERIMENTAL ANALYSIS OF MULTICELL WINGS BY MEANS OF PLASTIC MODELS. George W. Zender. June 1955. 6p. diagrs. (NACA RM L55E10b)

RAPID RADIANT-HEATING TESTS OF MULTIWEB BEAMS. Joseph N. Kotanchik, Aldie E. Johnson, Jr., and Robert D. Ross. September 1955. 30p. diagrs., photos., tab. (NACA TN 3474)

INFLUENCE OF SHEAR DEFORMATION ON THE CROSS SECTION ON TORSIONAL FREQUENCIES OF BOX BEAMS. Edwin T. Kruszewski and William W. Davenport. October 1955. 23p. diagrs. (NACA TN 3464)

EXPERIMENTAL INVESTIGATION OF THE VIBRATIONS OF A BUILT-UP RECTANGULAR BOX BEAM. Eldon E. Kordes and Edwin T. Kruszewski. February 1956. 28p. diagrs., photos., tabs. (NACA TN 3618)

ANALYSIS OF THE ULTIMATE STRENGTH AND OPTIMUM PROPORTIONS OF MULTIWEB WING STRUCTURES. B. Walter Rosen. March 1956. 34p. diagrs., tabs. (NACA TN 3633)

THE ACCURACY OF THE SUBSTITUTE-STRINGER APPROACH FOR DETERMINING THE BENDING FREQUENCIES OF MULTISTRINGER BOX BEAMS. William W. Davenport. April 1956. 28p. diagrs., tab. (NACA TN 3636)

A METHOD FOR DEFLECTION ANALYSIS OF THIN LOW-ASPECT-RATIO WINGS. Manuel Stein and J. Lyell Sanders, Jr. June 1956. 65p. diagrs. (NACA TN 3640)

(4.3.5) SHELLS

ON THE MECHANISM OF BUCKLING OF A CIRCULAR CYLINDRICAL SHELL UNDER AXIAL COMPRESSION. Y. Yoshimura. July 1955. 46p. diagrs., tab. (NACA TM 1390)

(4. 3. 5. 1) CYLINDERS

ON THE MECHANISM OF BUCKLING OF A CIRCULAR CYLINDRICAL SHELL UNDER AXIAL COMPRESSION. Y. Yoshimura. July 1955. 46p. diagrs., tab. (NACA TM 1390)

(4. 3. 5. 1. 1) Circular

ON THE MECHANISM OF BUCKLING OF A CIRCULAR CYLINDRICAL SHELL UNDER AXIAL COMPRESSION. Y. Yoshimura. July 1955. 46p. diagrs., tab. (NACA TM 1390)

TABLES OF COEFFICIENTS FOR THE ANALYSIS OF STRESSES ABOUT CUTOUTS IN CIRCULAR SEMIMONOCOQUE CYLINDERS WITH FLEXIBLE RINGS. Harvey G. McComb, Jr. and Emmet F. Low, Jr. July 1955. 98p. diagrs., 30 tabs. (NACA TN 3460)

COMPARISON BETWEEN THEORETICAL AND EXPERIMENTAL STRESSES IN CIRCULAR SEMIMONOCOQUE CYLINDERS WITH RECTANGULAR CUTOUTS. Harvey G. McComb, Jr., and Emmet F. Low, Jr. October 1955. 20p. diagrs. (NACA TN 3544)

ON PANEL FLUTTER AND DIVERGENCE OF INFINITELY LONG UNSTIFFENED AND RING-STIFFENED THIN-WALLED CIRCULAR CYLINDERS Robert W. Leonard and John M. Hedgepeth. April 1956. 52p. diagrs. (NACA TN 3638)

(4. 3. 5. 2)
BOXES

EXPERIMENTAL ANALYSIS OF MULTICELL WINGS BY MEANS OF PLASTIC MODELS. George W. Zender. June 1955. 6p. diagrs. (NACA RM L55E10b)

INFLUENCE OF SHEAR DEFORMATION ON THE CROSS SECTION ON TORSIONAL FREQUENCIES OF BOX BEAMS. Edwin T. Kruszewski and William W. Davenport. October 1955. 23p. diagrs. (NACA TN 3464)

EXPERIMENTAL INVESTIGATION OF THE VIBRATIONS OF A BUILT-UP RECTANGULAR BOX BEAM. Eldon E. Kordes and Edwin T. Kruszewski. February 1956. 28p. diagrs., photos., tabs. (NACA TN 3618)

THE ACCURACY OF THE SUBSTITUTE-STRINGER APPROACH FOR DETERMINING THE BENDING FREQUENCIES OF MULTISTRINGER BOX BEAMS. William W. Davenport. April 1956. 28p. diagrs., tab. (NACA TN 3636)

A METHOD FOR DEFLECTION ANALYSIS OF THIN LOW-ASPECT-RATIO WINGS. Manuel Stein and J. Lyell Sanders, Jr. June 1956. 65p. diagrs. (NACA TN 3640)

(4.3.6)
CONNECTIONS

(4. 3. 6. 2)
RIVETED

CREEP AND CREEP-RUPTURE CHARACTERISTICS OF SOME RIVETED AND SPOT-WELDED LAP JOINTS OF AIRCRAFT MATERIALS. Leonard Mordfin, National Bureau of Standards. June 1955. 53p. diagrs., photos., 6 tabs. (NACA TN 3412)

INVESTIGATION OF THE USE OF A RUBBER ANALOG IN THE STUDY OF STRESS DISTRIBUTION IN RIVETED AND CEMENTED JOINTS. Louis R. Demarkles, Massachusetts Institute of Technology. November 1955. 97p. diagrs., tabs. (NACA TN 3413)

STATIC SHEAR STRENGTH OF 2117-T4 (A17S-T4) ALUMINUM-ALLOY RIVETS AT ELEVATED TEMPERATURES. W. J. Dewalt and K. O. Bogardus, Aluminum Company of America. January 1956. 12p. diagrs., photo., tabs. (NACA RM 55I30)

(4. 3. 6. 3)
WELDED

CREEP AND CREEP-RUPTURE CHARACTERISTICS OF SOME RIVETED AND SPOT-WELDED LAP JOINTS OF AIRCRAFT MATERIALS. Leonard Mordfin, National Bureau of Standards. June 1955. 53p. diagrs., photos., 6 tabs. (NACA TN 3412)

(4. 3. 6. 4)
BONDED

INVESTIGATION OF THE USE OF A RUBBER ANALOG IN THE STUDY OF STRESS DISTRIBUTION IN RIVETED AND CEMENTED JOINTS. Louis R. Demarkles, Massachusetts Institute of Technology. November 1955. 97p. diagrs., tabs. (NACA TN 3413)

(4.3.7)
LOADS AND STRESSES

TEST OF AN AERODYNAMICALLY HEATED MULTIWEB WING STRUCTURE (MW-1) IN A FREE JET AT MACH NUMBER 2. Richard R. Heldenfels, Richard Rosecrans, and George E. Griffith. July 1953. 37p. diagrs., photos. (NACA RM L53E27)

CALIBRATION OF STRAIN-GAGE INSTALLATIONS IN AIRCRAFT STRUCTURES FOR THE MEASUREMENT OF FLIGHT LOADS. T. H. Skopinski, William S. Aiken, Jr. and Wilber B. Huston. 1954. ii, 29p. diagrs., 10 tabs. (NACA Rept. 1178. Formerly TN 2993; RM L52G31)

TABLES OF COEFFICIENTS FOR THE ANALYSIS OF STRESSES ABOUT CUTOUTS IN CIRCULAR SEMIMONOCOQUE CYLINDERS WITH FLEXIBLE RINGS. Harvey G. McComb, Jr. and Emmet F. Low, Jr. July 1955. 98p. diagrs., 30 tabs. (NACA TN 3460)

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(4. 3. 7. 1)
TENSION

ANALYSIS OF STRESSES IN THE PLASTIC RANGE AROUND A CIRCULAR HOLE IN A PLATE SUBJECTED TO UNIAXIAL TENSION. Bernard Budiansky and Robert J. Vidensek. October 1955. 39p. diagrs., tabs. (NACA TN 3542)

(4. 3. 7. 2)
COMPRESSION

INVESTIGATION OF THE USE OF A RUBBER ANALOG IN THE STUDY OF STRESS DISTRIBUTION IN RIVETED AND CEMENTED JOINTS. Louis R. Demarkles, Massachusetts Institute of Technology. November 1955. 97p. diagrs., tabs. (NACA TN 3413)

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(4. 3. 7. 3) BENDING

CHARTS RELATING THE COMPRESSIVE BUCKLING STRESS OF LONGITUDINALLY SUPPORTED PLATES TO THE EFFECTIVE DEFLECTIONAL AND ROTATIONAL STIFFNESS OF THE SUPPORTS. Roger A. Anderson and Joseph W. Semonian. 1954. ii, 19p. diagrs., tabs. (NACA Rept. 1202. Supersedes TN 2987)

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A METHOD FOR DEFLECTION ANALYSIS OF THIN LOW-ASPECT-RATIO WINGS. Manuel Stein and J. Lyell Sanders, Jr. June 1956. 65p. diagrs. (NACA TN 3640)

(4. 3. 7. 4) TORSION

STRESSES AND DEFLECTIONS OF A SWEPT BIPLANE WING. George W. Zender and John E. Duberg. August 1954. 41p. diagrs., photo., tabs. (NACA RM L54E03a)

EXPERIMENTAL ANALYSIS OF MULTICELL WINGS BY MEANS OF PLASTIC MODELS. George W. Zender. June 1955. 6p. diagrs. (NACA RM L55E10b)

SHEARING EFFECTIVENESS OF INTEGRAL STIFFENING. Robert F. Crawford and Charles Libove. June 1955. 37p. diagrs., photo., tab. (NACA TN 3443)

A METHOD FOR DEFLECTION ANALYSIS OF THIN LOW-ASPECT-RATIO WINGS. Manuel Stein and J. Lyell Sanders, Jr. June 1956. 65p. diagrs. (NACA TN 3640)

(4. 3. 7. 5) SHEAR

CREEP AND CREEP-RUPTURE CHARACTERISTICS OF SOME RIVETED AND SPOT-WELDED LAP JOINTS OF AIRCRAFT MATERIALS. Leonard Mordfin, National Bureau of Standards. June 1955. 53p. diagrs., photos., 6 tabs. (NACA TN 3412)

SHEARING EFFECTIVENESS OF INTEGRAL STIFFENING. Robert F. Crawford and Charles Libove. June 1955. 37p. diagrs., photo., tab. (NACA TN 3443)

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(4. 3. 7. 6) CONCENTRATED

CREEP AND CREEP-RUPTURE CHARACTERISTICS OF SOME RIVETED AND SPOT-WELDED LAP JOINTS OF AIRCRAFT MATERIALS. Leonard Mordfin, National Bureau of Standards. June 1955. 53p. diagrs., photos., 6 tabs. (NACA TN 3412)

ANALYSIS OF STRESSES IN THE PLASTIC RANGE AROUND A CIRCULAR HOLE IN A PLATE SUBJECTED TO UNIAXIAL TENSION. Bernard Budiansky and Robert J. Vidensek. October 1955. 39p. diagrs., tabs. (NACA TN 3542)

STRUCTURAL RESPONSE TO DISCRETE AND CONTINUOUS GUSTS OF AN AIRPLANE HAVING WING-BENDING FLEXIBILITY AND A CORRELATION OF CALCULATED AND FLIGHT RESULTS. John C. Houbolt and Eldon E. Kordes. 1954. ii, 22p. diagrs., 4 tabs. (NACA Rept. 1181. Formerly TN 3006)

(4. 3. 7. 7) DYNAMIC

MEASUREMENTS OF NORMAL-FORCE-COEFFICIENT FLUCTUATION ON FOUR 9-PERCENT-THICK AIRFOILS HAVING DIFFERENT LOCATIONS OF MAXIMUM THICKNESS. Milton D. Humphreys. April 1954. 21p. diagrs., photos. (NACA RM L54B22)

MEASUREMENT AND ANALYSIS OF WING AND TAIL BUFFETING LOADS ON A FIGHTER AIRPLANE. Wilber B. Huston and T. H. Skopinski. 1955. i, 27p. diagrs., photo., tabs. (NACA Rept. 1219. Supersedes TN 3080)

SIMPLIFIED PROCEDURES AND CHARTS FOR THE RAPID ESTIMATION OF BENDING FREQUENCIES OF ROTATING BEAMS. Robert T. Yntema. June 1955. ii, 90p. diagrs., 6 tabs. (NACA TN 3459. Supersedes and extends RM L54G02)

A STUDY OF THE RESPONSE OF PANELS TO RANDOM ACOUSTIC EXCITATION. Robert W. Hess, Leslie W. Lassiter and Harvey H. Hubbard. July 1955. 9p. diagrs. (NACA RM L55E13c)

GUST-TUNNEL INVESTIGATION OF THE EFFECT OF A SHARP-EDGE GUST ON THE FLAPWISE BLADE BENDING MOMENTS OF A MODEL HELICOPTER ROTOR. Domenic J. Maglieri and Thomas D. Reisert. August 1955. 24p. diagrs., photos. (NACA TN 3470)

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INVESTIGATION OF THE VIBRATIONS OF A HOLLOW THIN-WALLED RECTANGULAR BEAM. Eldon E. Kordes and Edwin T. Kruszewski. October 1955. 24p. diagrs., photos., 2 tabs. (NACA TN 3463)

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METHOD AND TABLES FOR DETERMINING THE TIME RESPONSE TO A UNIT IMPULSE FROM FREQUENCY-RESPONSE DATA AND FOR DETERMINING THE FOURIER TRANSFORM OF A FUNCTION OF TIME. Carl R. Huss and James J. Donegan. January 1956. 38p. diagrs., tabs. (NACA TN 3598)

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INFLUENCE OF LARGE AMPLITUDES ON FLEXURAL MOTIONS OF ELASTIC PLATES. George Herrmann, Columbia University. May 1956. 45p. diagrs. (NACA TN 3578)

(4.3.7.7.1)
Repeated

AXIAL-LOAD FATIGUE PROPERTIES OF 24S-T AND 75S-T ALUMINUM ALLOY AS DETERMINED IN SEVERAL LABORATORIES. H. J. Grover and W. S. Hyler, Battelle Memorial Institute, Paul Kuhn and Charles B. Landers, Langley Aeronautical Laboratory and F. M. Howell, Aluminum Company of America. 1954. ii, 25p. diagrs., photos., 7 tabs. (NACA Rept. 1190. Formerly TN 2928)

ON SPECTRAL ANALYSIS OF RUNWAY ROUGHNESS AND LOADS DEVELOPED DURING TAXIING. John C. Houbolt, James H. Walls and Robert F. Smiley. July 1955. 9p. diagrs. (NACA TN 3484)

INTERIM REPORT ON FATIGUE CHARACTERISTICS OF A TYPICAL METAL WING. J. L. Kepert and A. O. Payne. March 1956. 80p. diagrs., photos., tabs. (NACA TM 1397. Originally issued as Report ARL/SM. 207, Aeronautical Research Laboratories, Australia)

RESULTS OF AXIAL-LOAD FATIGUE TESTS ON ELECTRO-POLISHED 2024-T3 AND 7075-T6 ALUMINUM-ALLOY-SHEET SPECIMENS WITH CENTRAL HOLES. Charles B. Landers and Herbert F. Hardrath. March 1956. 47p. diagrs., tabs. (NACA TN 3631)

(4.3.7.7.2)
Transient

EFFECT OF INTERACTION ON LANDING-GEAR BEHAVIOR AND DYNAMIC LOADS IN A FLEXIBLE AIRPLANE STRUCTURE. Francis E. Cook and Benjamin Milwitzky. August 1955. 75p. diagrs., 2 tabs. (NACA TN 3467)

(4.3.8)
WEIGHT ANALYSIS

ANALYSIS OF THE ULTIMATE STRENGTH AND OPTIMUM PROPORTIONS OF MULTIWEB WING STRUCTURES. B. Walter Rosen. March 1956. 34p. diagrs., tabs. (NACA TN 3633)

(5)
MATERIALS

(5)
MATERIALS

PRELIMINARY INVESTIGATION IN J33 TURBOJET ENGINE OF SEVERAL ROOT DESIGNS FOR CERAMAL TURBINE BLADES. George C. Deutsch, Andre J. Meyer, Jr. and William C. Morgan. January 1953. 24p. diagrs., photos., 2 tabs. (NACA RM E52K13)

(5.1) Types

WIRE CLOTH AS POROUS MATERIAL FOR TRANSPIRATION-COOLED WALLS. E. R. G. Eckert, Martin R. Kinsler, and Reeves P. Cochran. November 1951. 38p. diagrs., photos., tab. (NACA RM E51H23)

EXPERIMENTAL INVESTIGATION OF AIR-FLOW UNIFORMITY AND PRESSURE LEVEL ON WIRE CLOTH FOR TRANSPIRATION-COOLING APPLICATIONS. Patrick L. Donoughe and Roy A. McKinnon. January 1956. 28p. diagrs., photos., tab. (NACA TN 3652. Supersedes RM E52E16)

(5.1.1) ALUMINUM

INVESTIGATION OF EFFECTS OF ADDITIVES ON STORAGE PROPERTIES OF FUMING NITRIC ACIDS. Charles E. Feiler and Gerald Morrell. December 1952. 25p. photos., diagrs., tabs. (NACA RM E52J16)

AXIAL-LOAD FATIGUE PROPERTIES OF 24S-T AND 75S-T ALUMINUM ALLOY AS DETERMINED IN SEVERAL LABORATORIES. H. J. Grover and W. S. Hyler, Battelle Memorial Institute, Paul Kuhn and Charles B. Landers, Langley Aeronautical Laboratory and F. M. Howell, Aluminum Company of America. 1954. ii, 25p. diagrs., photos., 7 tabs. (NACA Rept. 1190. Formerly TN 2928)

TENSILE PROPERTIES OF SOME SHEET MATERIALS UNDER RAPID-HEATING CONDITIONS. George J. Heimerl and John E. Inge. June 1955. 10p. diagrs. (NACA RM L55E12b)

TENSILE PROPERTIES OF 7075-T6 AND 2024-T3 ALUMINUM-ALLOY SHEET HEATED AT UNIFORM TEMPERATURE RATES UNDER CONSTANT LOAD. George J. Heimerl and John E. Inge. July 1955. 46p. diagrs., photos., 4 tabs. (NACA TN 3462)

CUMULATIVE FATIGUE DAMAGE OF AXIALLY LOADED ALCLAD 75S-T6 AND ALCLAD 24S-T3 ALUMINUM-ALLOY SHEET. Ira Smith, Darnley M. Howard, and Frank C. Smith, National Bureau of Standards. September 1955. 49p. diagrs., photos., 5 tabs. (NACA TN 3293)

METALLOGRAPHY OF ALUMINUM AND ITS ALLOYS. USE OF ELECTROLYTIC POLISHING. (Métallographie de l'aluminium et de ses alliages. Emploi du polissage électrolytique). P. A. Jacquet. November 1955. ii, 80p. diagrs., photos., tabs. (NACA TM 1384. Trans. from Office National d'Études et de Recherches Aéronautiques, Pub.51, 1952)

GRAIN-BOUNDARY BEHAVIOR IN CREEP OF ALUMINUM BICRYSTALS. F. N. Rhines, W. E. Bond, and M. A. Kissel, Carnegie Institute of Technology. December 1955. 56p. diagrs., photos., tabs. (NACA TN 3556)

RESULTS OF AXIAL-LOAD FATIGUE TESTS ON ELECTRO-POLISHED 2024-T3 AND 7075-T6 ALUMINUM-ALLOY-SHEET SPECIMENS WITH CENTRAL HOLES. Charles B. Landers and Herbert F. Hardrath. March 1956. 47p. diagrs., tabs. (NACA TN 3631)

ANALYSIS OF THE ULTIMATE STRENGTH AND OPTIMUM PROPORTIONS OF MULTIWEB WING STRUCTURES. B. Walter Rosen. March 1956. 34p. diagrs., tabs. (NACA TN 3633)

INFLUENCE OF ALLOYING UPON GRAIN-BOUNDARY CREEP. F. N. Rhines, W. E. Bond and M. A. Kissel, Carnegie Institute of Technology. April 1956. 16p. diagrs., tab. (NACA TN 3678)

INVESTIGATION OF PLASTIC BEHAVIOR OF BINARY ALUMINUM ALLOYS BY INTERNAL-FRICTION METHODS. R. E. Maringer, L. L. Marsh, and G. K. Manning, Battelle Memorial Institute. June 1956. 44p. diagrs., tabs. (NACA TN 3681)

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(5.1.3) STEELS

INVESTIGATION OF EFFECTS OF ADDITIVES ON STORAGE PROPERTIES OF FUMING NITRIC ACIDS. Charles E. Feiler and Gerald Morrell. December 1952. 25p. photos., diagrs., tabs. (NACA RM E52J16)

DYNAMIC CORROSION IN AN IRON-STAINLESS STEEL TOROID BY SODIUM AT 900° F. Robert A. Lad. January 15, 1954. 9p. diagrs., tabs. (NACA RM E54A27)

(5.1.4) HEAT-RESISTING ALLOYS

DESIGN FACTORS FOR 4- BY 8-INCH RAM-JET COMBUSTOR. Donald W. Male and Adolph J. Cervenka. August 11, 1949. 47p. diagrs., photos. (NACA RM E9F09)

INFILTRATION OF TITANIUM CARBIDE WITH SEVERAL METALS. Raymond S. Gurnick and Anthony L. Cooper. July 1952. 21p. diagrs., photos. (NACA RM E52E27)

INVESTIGATION OF THE Ni_3Al PHASE OF NICKEL-ALUMINUM ALLOYS. Edward M. Grala. April 1956. 24p. diagrs., photos., tabs. (NACA TN 3660)

(5.1.5) CERAMICS

INFILTRATION OF TITANIUM CARBIDE WITH SEVERAL METALS. Raymond S. Gurnick and Anthony L. Cooper. July 1952. 21p. diagrs., photos. (NACA RM E52E27)

THE NICKEL DIP: A RADIOISOTOPE STUDY OF METALLIC DEPOSITS IN PROCELAIN ENAMELING. Joseph C. Richmond, Harry B. Kirkpatrick, and William N. Harrison, National Bureau of Standards. February 1956. 26p. diagrs., photos., tabs. (NACA TN 3577)

INFLUENCE OF COPPER IONS ON ADHERENCE OF VITREOUS COATINGS TO STAINLESS STEEL. D. G. Moore and A. G. Eubanks, National Bureau of Standards. February 1956. 14p. diagrs., photos., tabs. (NACA TN 3679)

(5.1.6) PLASTICS

EXPERIMENTAL ANALYSIS OF MULTICELL WINGS BY MEANS OF PLASTIC MODELS. George W. Zender. June 1955. 6p. diagrs. (NACA RM L55E10b)

INFLUENCE OF TEMPERATURE ON CREEP, STRESS-RUPTURE, AND STATIC PROPERTIES OF MELAMINE-RESIN AND SILICONE-RESIN GLASS-FABRIC LAMINATES. William N. Findley, Harlan W. Peithman, and Will J. Worley, University of Illinois. January 1956. 71p. diagrs., photos., tabs. (NACA TN 3414)

(5.1.8) ADHESIVES

METAL-BONDING ADHESIVES FOR HIGH-TEMPERATURE SERVICE. John M. Black and R. F. Blomquist, Forest Products Laboratory. July 1955. 22p. tab. (NACA RM 55F08)

(5.1.9) PROTECTIVE COATINGS

EXPERIMENTAL INVESTIGATION OF AIR-COOLED TURBINE BLADES IN TURBOJET ENGINE. XIII - ENDURANCE EVALUATION OF SEVERAL PROTECTIVE COATINGS APPLIED TO TURBINE BLADES OF NONSTRATEGIC STEELS. Edward R. Bartoo and John L. Clure. July 1953. 40p. photos., diagrs., tabs. (NACA RM E53E18)

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(5.1.12) CERAMALS

INFILTRATION OF TITANIUM CARBIDE WITH SEVERAL METALS. Raymond S. Gurnick and Anthony L. Cooper. July 1952. 21p. diagrs., photos. (NACA RM E52E27)

PRELIMINARY INVESTIGATION IN J33 TURBOJET ENGINE OF SEVERAL ROOT DESIGNS FOR CERAMAL TURBINE BLADES. George C. Deutsch, Andre J. Meyer, Jr. and William C. Morgan. January 1953. 24p. diagrs., photos., 2 tabs. (NACA RM E52K13)

COMPARATIVE TENSILE STRENGTHS AT 1200° F OF VARIOUS ROOT DESIGNS FOR CERMET TURBINE BLADES. Andre J. Meyer, Jr., Albert Kaufman, and Howard F. Calvert. June 1953. 23p. diagrs., photos., tabs. (NACA RM E53C25)

PRELIMINARY INVESTIGATION OF SEVERAL ROOT DESIGNS FOR CERMET TURBINE BLADES IN TURBOJET ENGINE. II - ROOT DESIGN ALTERATIONS. A. J. Meyer, Jr., G. C. Deutsch and W. C. Morgan. October 1953. 34p. photos., diagrs., tab. (NACA RM E53G02)

PRELIMINARY INVESTIGATION OF SEVERAL ROOT DESIGNS FOR CERMET TURBINE BLADES IN TURBOJET ENGINE. III - CURVED-ROOT DESIGN. Benjamin Pinkel, George C. Deutsch, and William C. Morgan. December 1955. 17p. diagr., photos., tabs. (NACA RM E55J04)

(5.2)
Properties

ON THE PERMEABILITY OF POROUS MATERIALS. E. Carson Yates, Jr. January 1956. 31p. diagrs. (NACA TN 3596)

PERFORATED SHEETS AS A POROUS MATERIAL FOR DISTRIBUTED SUCTION AND INJECTION. Robert E. Dannenberg, Bruno J. Gambucci, and James A. Weiberg. April 1956. 27p. diagrs., photos. (NACA TN 3669)

(5.2.1)
TENSILE

TENSILE PROPERTIES OF SOME SHEET MATERIALS UNDER RAPID-HEATING CONDITIONS. George J. Heimerl and John E. Inge. June 1955. 10p. diagrs. (NACA RM L55E12b)

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INVESTIGATION OF THE Ni_3Al PHASE OF NICKEL-ALUMINUM ALLOYS. Edward M. Grala. April 1956. 24p. diagrs., photos., tabs. (NACA TN 3660)

INFLUENCE OF ALLOYING UPON GRAIN-BOUNDARY CREEP. F. N. Rhines, W. E. Bond and M. A. Kissel, Carnegie Institute of Technology. April 1956. 16p. diagrs., tab. (NACA TN 3678)

(5.2.2)
COMPRESSIVE

INFLUENCE OF TEMPERATURE ON CREEP, STRESS-RUPTURE, AND STATIC PROPERTIES OF MELAMINE-RESIN AND SILICONE-RESIN GLASS-FABRIC LAMINATES. William N. Findley, Harlan W. Peithman, and Will J. Worley, University of Illinois. January 1956. 71p. diagrs., photos., tabs. (NACA TN 3414)

CORRELATION OF CRIPPLING STRENGTH OF PLATE STRUCTURES WITH MATERIAL PROPERTIES. Roger A. Anderson and Melvin S. Anderson. January 1956. 50p. diagrs., tabs. (NACA TN 3600)

(5.2.3)
CREEP

EXPERIMENTAL ANALYSIS OF MULTICELL WINGS BY MEANS OF PLASTIC MODELS. George W. Zender. June 1955. 6p. diagrs. (NACA RM L55E10b)

EFFECT OF SOME SELECTED HEAT TREATMENTS ON THE OPERATING LIFE OF CAST HS-21 TURBINE BLADES. Francis J. Clauss, Floyd B. Garrett and John W. Weeton. July 1955. 39p. diagrs., photos. (NACA TN 3512)

THEORY OF DYNAMIC CREEP. (K teorii dinamicheskoi polzuchesti). A. A. Predvoditelev and B. A. Smirnov. September 1955. 12p. diagr. (NACA TM 1330. Trans. from Moscow Universitet, Vestnik, v.8, no.8, 1953, p.79-86)

INFLUENCE OF TEMPERATURE ON CREEP, STRESS-RUPTURE, AND STATIC PROPERTIES OF MELAMINE-RESIN AND SILICONE-RESIN GLASS-FABRIC LAMINATES. William N. Findley, Harlan W. Peithman, and Will J. Worley, University of Illinois. January 1956. 71p. diagrs., photos., tabs. (NACA TN 3414)

INVESTIGATION OF THE COMPRESSIVE STRENGTH AND CREEP LIFETIME OF 2024-T3 ALUMINUM-ALLOY PLATES AT ELEVATED TEMPERATURES. Eldon E. Mathauser and William D. Deveikis. January 1956. 40p. diagrs., photos., tabs. (NACA TN 3552. Supersedes RM L55E11b)

INVESTIGATION OF THE Ni_3Al PHASE OF NICKEL-ALUMINUM ALLOYS. Edward M. Grala. April 1956. 24p. diagrs., photos., tabs. (NACA TN 3660)

INFLUENCE OF ALLOYING UPON GRAIN-BOUNDARY CREEP. F. N. Rhines, W. E. Bond and M. A. Kissel, Carnegie Institute of Technology. April 1956. 16p. diagrs., tab. (NACA TN 3678)

CORRELATION OF CREEP-BUCKLING TESTS WITH THEORY. Sharad A. Patel, Joseph Kempner, Burton Erickson, and Abol H. Mobassery, Polytechnic Institute of Brooklyn. May 1956. 39p. diagrs., photos., tabs. (NACA RM 56C20)

INVESTIGATION OF THE COMPRESSIVE STRENGTH AND CREEP LIFETIME OF 2024-T ALUMINUM-ALLOY SKIN-STRINGER PANELS AT ELEVATED TEMPERATURES. Eldon E. Mathauser and William D. Deveikis. May 1956. 29p. diagrs., photos., tabs. (NACA TN 3647)

(5.2.4)
STRESS-RUPTURE

PRELIMINARY INVESTIGATION OF SEVERAL ROOT DESIGNS FOR CERMET TURBINE BLADES IN TURBOJET ENGINE. II - ROOT DESIGN ALTERATIONS. A. J. Meyer, Jr., G. C. Deutsch and W. C. Morgan. October 1953. 34p. photos., diagrs., tab. (NACA RM E53G02)

EFFECT OF SOME SELECTED HEAT TREATMENTS ON THE OPERATING LIFE OF CAST HS-21 TURBINE BLADES. Francis J. Clauss, Floyd B. Garrett and John W. Weeton. July 1955. 39p. diagrs., photos. (NACA TN 3512)

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(5.2.5)
FATIGUE

AXIAL-LOAD FATIGUE PROPERTIES OF 24S-T AND 75S-T ALUMINUM ALLOY AS DETERMINED IN SEVERAL LABORATORIES. H. J. Grover and W. S. Hyler, Battelle Memorial Institute, Paul Kuhn and Charles B. Landers, Langley Aeronautical Laboratory and F. M. Howell, Aluminum Company of America. 1954. ii, 25p. diagrs., photos., 7 tabs. (NACA Rept. 1190. Formerly TN 2928)

CUMULATIVE FATIGUE DAMAGE OF AXIALLY LOADED ALCLAD 75S-T6 AND ALCLAD 24S-T3 ALUMINUM-ALLOY SHEET. Ira Smith, Darnley M. Howard, and Frank C. Smith, National Bureau of Standards. September 1955. 49p. diagrs., photos., 5 tabs. (NACA TN 3293)

FAILURE OF MATERIALS UNDER COMBINED REPEATED STRESSES WITH SUPERIMPOSED STATIC STRESSES. George Sines, University of California at Los Angeles. November 1955. 69p. diagrs., photos., tabs. (NACA TN 3495)

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ELEVATED-TEMPERATURE FATIGUE PROPERTIES OF TWO TITANIUM ALLOYS. William K. Rey, University of Alabama. April 24, 1956. 28p. diagrs., photo., tabs. (NACA RM 56B07)

FATIGUE CRACK PROPAGATION IN SEVERELY NOTCHED BARS. W. S. Hyler, E. D. Abraham, and H. J. Grover, Battelle Memorial Institute. June 1956. 31p. diagrs., photos., tabs. (NACA TN 3685)

(5.2.6)
SHEAR

SHEARING EFFECTIVENESS OF INTEGRAL STIFFENING. Robert F. Crawford and Charles Libove. June 1955. 37p. diagrs., photo., tab. (NACA TN 3443)

METAL-BONDING ADHESIVES FOR HIGH-TEMPERATURE SERVICE. John M. Black and R. F. Blomquist, Forest Products Laboratory. July 1955. 22p. tab. (NACA RM 55F08)

STATIC SHEAR STRENGTH OF 2117-T4 (A17S-T4) ALUMINUM-ALLOY RIVETS AT ELEVATED TEMPERATURES. W. J. Dewalt and K. O. Bogardus, Aluminum Company of America. January 1956. 12p. diagrs., photo., tabs. (NACA RM 55I30)

(5.2.7)
FLEXURAL

EXPERIMENTAL ANALYSIS OF MULTICELL WINGS BY MEANS OF PLASTIC MODELS. George W. Zender. June 1955. 6p. diagrs. (NACA RM L55E10b)

(5.2.8)
CORROSION RESISTANCE

INVESTIGATION OF EFFECTS OF ADDITIVES ON STORAGE PROPERTIES OF FUMING NITRIC ACIDS. Charles E. Feiler and Gerald Morrell. December 1952. 25p. photos., diagrs., tabs. (NACA RM E52J16)

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INVESTIGATION OF EFFECT OF FLUORIDE ON CORROSION OF 2S-0 ALUMINUM AND 347 STAINLESS STEEL IN FUMING NITRIC ACID AT 170° F. Charles E. Feiler and Gerald Morrell. February 1954. 22p. diagrs., photos., tabs. (NACA RM E53L17b)

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INVESTIGATION OF THE Ni_3Al PHASE OF NICKEL-ALUMINUM ALLOYS. Edward M. Grala. April 1956. 24p. diagrs., photos., tabs. (NACA TN 3660)

(5.2.9) STRUCTURE

EFFECT OF SOME SELECTED HEAT TREATMENTS ON THE OPERATING LIFE OF CAST HS-21 TURBINE BLADES. Francis J. Clauss, Floyd B. Garrett and John W. Weeton. July 1955. 39p. diagrs., photos. (NACA TN 3512)

METALLOGRAPHY OF ALUMINUM AND ITS ALLOYS. USE OF ELECTROLYTIC POLISHING. (Métallographie de l'aluminium et de ses alliages. Emploi du polissage électrolytique). P. A. Jacquet. November 1955. ii, 80p. diagrs., photos., tabs. (NACA TM 1384. Trans. from Office National d'Études et de Recherches Aéronautiques, Pub.51, 1952)

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CORRELATION OF SUPERSONIC CONVECTIVE HEAT-TRANSFER COEFFICIENTS FROM MEASUREMENTS OF THE SKIN TEMPERATURE OF A PARABOLIC BODY OF REVOLUTION (NACA RM-10). Leo T. Chauvin and Carlos A. deMoraes. March 1956. 38p. diagrs., photo., tabs. (NACA TN 3623. Supersedes RM L51A18)

INFLUENCE OF ALLOYING UPON GRAIN-BOUNDARY CREEP. F. N. Rhines, W. E. Bond and M. A. Kissel, Carnegie Institute of Technology. April 1956. 16p. diagrs., tab. (NACA TN 3678)

(5.2.10) EFFECTS OF NUCLEAR RADIATION

DYNAMIC CORROSION IN AN IRON-STAINLESS STEEL TOROID BY SODIUM AT 900° F. Robert A. Lad. January 15, 1954. 9p. diagrs., tabs. (NACA RM E54A27)

(5.2.11) THERMAL

TENSILE PROPERTIES OF SOME SHEET MATERIALS UNDER RAPID-HEATING CONDITIONS. George J. Heimerl and John E. Inge. June 1955. 10p. diagrs. (NACA RM L55E12b)

METAL-BONDING ADHESIVES FOR HIGH-TEMPERATURE SERVICE. John M. Black and R. F. Blomquist, Forest Products Laboratory. July 1955. 22p. tab. (NACA RM 55F08)

TENSILE PROPERTIES OF 7075-T6 AND 2024-T3 ALUMINUM-ALLOY SHEET HEATED AT UNIFORM TEMPERATURE RATES UNDER CONSTANT LOAD. George J. Heimerl and John E. Inge. July 1955. 46p. diagrs., photos., 4 tabs. (NACA TN 3462)

DEVELOPMENT OF EQUIPMENT AND OF EXPERIMENTAL TECHNIQUES FOR COLUMN CREEP TESTS. Sharad A. Patel, Martin Bloom, Burton Erickson, Alexander Chwick and N(icholas) J(oh n) Hoff, Polytechnic Institute of Brooklyn. September 1955. 20p. diagrs., photos., tab. (NACA TN 3493)

RESPONSE OF HOMOGENEOUS AND TWO-MATERIAL LAMINATED CYLINDERS TO SINUSOIDAL ENVIRONMENTAL TEMPERATURE CHANGE, WITH APPLICATIONS TO HOT-WIRE ANEMOMETRY AND THERMOCOUPLE PYROMETRY. Herman H. Lowell and Norman (A.) Patton. September 1955. ii, 143p. diagrs., tabs. (NACA TN 3514)

STATIC SHEAR STRENGTH OF 2117-T4 (A17S-T4) ALUMINUM-ALLOY RIVETS AT ELEVATED TEMPERATURES. W. J. Dewalt and K. O. Bogardus, Aluminum Company of America. January 1956. 12p. diagrs., photo., tabs. (NACA RM 55I30)

(5.2.13) PLASTICITY

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(5.3)
Operating Stresses and Conditions

PRELIMINARY INVESTIGATION IN J33 TURBOJET ENGINE OF SEVERAL ROOT DESIGNS FOR CERAMAL TURBINE BLADES. George C. Deutsch, Andre J. Meyer, Jr. and William C. Morgan. January 1953. 24p. diagrs., photos., 2 tabs. (NACA RM E52K13)

COMPARATIVE TENSILE STRENGTHS AT 1200° F OF VARIOUS ROOT DESIGNS FOR CERMET TURBINE BLADES. Andre J. Meyer, Jr., Albert Kaufman, and Howard F. Calvert. June 1953. 23p. diagrs., photos., tabs. (NACA RM E53C25)

A STUDY OF THE RESPONSE OF PANELS TO RANDOM ACOUSTIC EXCITATION. Robert W. Hess, Leslie W. Lassiter and Harvey H. Hubbard. July 1955. 9p. diagrs. (NACA RM L55E13c)

(5.3.2)
PROPULSION SYSTEM

PRELIMINARY INVESTIGATION IN J33 TURBOJET ENGINE OF SEVERAL ROOT DESIGNS FOR CERAMAL TURBINE BLADES. George C. Deutsch, Andre J. Meyer, Jr. and William C. Morgan. January 1953. 24p. diagrs., photos., 2 tabs. (NACA RM E52K13)

PRELIMINARY INVESTIGATION OF SEVERAL ROOT DESIGNS FOR CERMET TURBINE BLADES IN TURBOJET ENGINE. II - ROOT DESIGN ALTERATIONS. A. J. Meyer, Jr., G. C. Deutsch and W. C. Morgan. October 1953. 34p. photos., diagrs., tab. (NACA RM E53G02)

EXPERIMENTAL INVESTIGATION OF AIR-COOLED TURBINE BLADES IN TURBOJET ENGINE. XIV - ENDURANCE EVALUATION OF SHELL-SUPPORTED TURBINE ROTOR BLADES MADE OF TIMKEN 17-22A(S) STEEL. Francis S. Stepka, H. Robert Bear, and John L. Clure. September 1954. 29p. diagrs., photos., tabs. (NACA RM E54F23a)

PRELIMINARY INVESTIGATION OF SEVERAL ROOT DESIGNS FOR CERMET TURBINE BLADES IN TURBOJET ENGINE. III - CURVED-ROOT DESIGN. Benjamin Pinkel, George C. Deutsch, and William C. Morgan. December 1955. 17p. diagr., photos., tabs. (NACA RM E55J04)

THE DESIGN OF A MINIATURE SOLID-PROPELLANT ROCKET. Robert H. Heitkotter. March 1956. 13p. diagrs., photo., tab. (NACA TN 3620)

(6)
METEOROLOGY

(6)
METEOROLOGY

IMPINGEMENT OF CLOUD DROPLETS ON A CYLINDER AND PROCEDURE FOR MEASURING LIQUID-WATER CONTENT AND DROPLET SIZES IN SUPERCOOLED CLOUDS BY ROTATING MULTICYLINDER METHOD. R. J. Brun, W. Lewis, P. J. Perkins and J. S. Serafini. Appendix E: ALTERNATE METHOD OF REDUCING ROTATING MULTICYLINDER DATA. Paul T. Hacker. 1955. iv, 43p. diagrs., photos., tabs. (NACA Rept. 1215. Supersedes TN 2903; TN 2904; RM E53D23)

IMPINGEMENT OF WATER DROPLETS ON A SPHERE. Robert G. Dorsch, Paul G. Saper, and Charles F. Kadow. November 1955. 29p. diagrs., tab. (NACA TN 3587)

(6.1) Atmosphere

IMPINGEMENT OF CLOUD DROPLETS ON A CYLINDER AND PROCEDURE FOR MEASURING LIQUID-WATER CONTENT AND DROPLET SIZES IN SUPERCOOLED CLOUDS BY ROTATING MULTICYLINDER METHOD. R. J. Brun, W. Lewis, P. J. Perkins and J. S. Serafini. Appendix E: ALTERNATE METHOD OF REDUCING ROTATING MULTICYLINDER DATA. Paul T. Hacker. 1955. iv, 43p. diagrs., photos., tabs. (NACA Rept. 1215. Supersedes TN 2903; TN 2904; RM E53D23)

(6.1.1) STANDARD ATMOSPHERE

STANDARD ATMOSPHERE—TABLES AND DATA FOR ALTITUDES TO 65,800 FEET. International Civil Aviation Organization, Montreal, Canada and Langley Aeronautical Laboratory, Langley Field, Va. 1955, v, 114p. tabs. (NACA Rept. 1235. Supersedes TN 3182; Rept. 218)

(6.1.2) GUSTS

THE VARIATION OF ATMOSPHERIC TURBULENCE WITH ALTITUDE AND ITS EFFECT ON AIRPLANE GUST LOADS. Robert L. McDougal, Thomas L. Coleman and Philip L. Smith. November 1953. 16p. diagrs., 2 tabs. (NACA RM L53G15a)

SOME DESIGN CONSIDERATIONS PERTINENT TO THE ROUGH-AIR BEHAVIOR OF AIRPLANES AT LOW ALTITUDE. Philip Donely and Clarence L. Gillis. November 1953. 21p. diagrs., tabs. (NACA RM L53J01b)

STRUCTURAL RESPONSE TO DISCRETE AND CONTINUOUS GUSTS OF AN AIRPLANE HAVING WING-BENDING FLEXIBILITY AND A CORRELATION OF CALCULATED AND FLIGHT RESULTS. John C. Houbolt and Eldon E. Kordes. 1954. ii, 22p. diagrs., 4 tabs. (NACA Rept. 1181. Formerly TN 3006)

A REVISED GUST-LOAD FORMULA AND A REEVALUATION OF V-G DATA TAKEN ON CIVIL TRANSPORT AIRPLANES FROM 1933 TO 1950. Kermit G. Pratt and Walter G. Walker. 1954. ii, 9p. diagrs., tabs. (NACA Rept. 1206. Supersedes TN 2964; TN 3041)

A REEVALUATION OF GUST-LOAD STATISTICS FOR APPLICATIONS IN SPECTRAL CALCULATIONS. Harry Press and May T. Meadows. August 1955. 19p. diagrs. (NACA TN 3540)

AN ANALYSIS OF ACCELERATION, AIRSPEED, AND GUST-VELOCITY DATA FROM A FOUR-ENGINE TRANSPORT AIRPLANE IN OPERATIONS ON AN EASTERN UNITED STATES ROUTE. Thomas L. Coleman and Mary W. Fetner. September 1955. 20p. diagrs., 3 tabs. (NACA TN 3483)

AN ANALYSIS OF ACCELERATION, AIRSPEED, AND GUST-VELOCITY DATA FROM ONE TYPE OF FOUR-ENGINE TRANSPORT AIRPLANE OPERATED OVER TWO DOMESTIC ROUTES. Martin R. Copp and Thomas L. Coleman. October 1955. 29p. diagrs., tabs. (NACA TN 3475)

SUMMARY OF DERIVED GUST VELOCITIES OBTAINED FROM MEASUREMENTS WITHIN THUNDERSTORMS. H(arold) B. Tolefson. October 1955. 19p. diagrs., tabs. (NACA TN 3538)

GUST-LOAD AND AIRSPEED DATA FROM ONE TYPE OF TWO-ENGINE AIRPLANE ON SIX CIVIL AIRLINE ROUTES FROM 1947 TO 1955. Walter G. Walker. February 1956. 25p. diagrs., tabs. (NACA TN 3621)

SUMMARY OF LOCATIONS AND EXTENTS OF TURBULENT AREAS ENCOUNTERED DURING FLIGHT INVESTIGATIONS OF THE JET STREAM FROM OCTOBER 1953 TO MAY 1954 AND NOVEMBER 1954 TO JULY 1955. Mary W. Fetner. April 1956. 10p. tab. (NACA RM L55H04a)

(6.1.2.1) STRUCTURE

MEASUREMENTS OF ATMOSPHERIC TURBULENCE OVER A WIDE RANGE OF WAVELENGTH FOR ONE METEOROLOGICAL CONDITION. Harold L. Crane and Robert G. Chilton. June 1956. 18p. diagrs., photo. (NACA TN 3702)

(6.1.2.2) FREQUENCY

MEASUREMENTS OF ATMOSPHERIC TURBULENCE OVER A WIDE RANGE OF WAVELENGTH FOR ONE METEOROLOGICAL CONDITION. Harold L. Crane and Robert G. Chilton. June 1956. 18p. diagrs., photo. (NACA TN 3702)

(6.1.2.3) TURBULENCE

MEASUREMENTS OF ATMOSPHERIC TURBULENCE OVER A WIDE RANGE OF WAVELENGTH FOR ONE METEOROLOGICAL CONDITION. Harold L. Crane and Robert G. Chilton. June 1956. 18p. diagrs., photo. (NACA TN 3702)

(6.1.2.4) ALLEVIATION

METEOROLOGICAL PROBLEMS ASSOCIATED WITH COMMERCIAL TUBOJET-AIRCRAFT OPERATION. A working group of the NACA Subcommittee on Meteorological Problems. June 1955. 46p. (NACA RM 54L29)

THEORETICAL STUDY OF THE LATERAL FREQUENCY RESPONSE TO GUSTS OF A FIGHTER AIRPLANE, BOTH WITH CONTROLS FIXED AND WITH SEVERAL TYPES OF AUTOPILOTS. James J. Adams and Charles W. Mathews. March 1956. 46p. diagrs., tabs. (NACA TN 3603)

ANALYTICAL STUDY OF MODIFICATIONS TO THE AUTOPILOT OF A FIGHTER AIRPLANE IN ORDER TO REDUCE THE RESPONSE TO SIDE GUSTS. Charles W. Mathews and James J. Adams. March 1956. 35p. diagrs., tabs. (NACA TN 3635)

ANALYSIS OF A VANE-CONTROLLED GUST-ALLEVIATION SYSTEM. Robert W. Boucher and Christopher C. Kraft, Jr. April 1956. 45p. diagrs., tabs. (NACA TN 3597)

INITIAL RESULTS OF A FLIGHT INVESTIGATION OF A GUST-ALLEVIATION SYSTEM. Christopher C. Kraft, Jr. April 1956. 19p. diagrs., photos., tabs. (NACA TN 3612)

AN INVESTIGATION OF FORWARD-LOCATED FIXED SPOILERS AND DEFLECTORS AS GUST ALLEVIATORS ON AN UNSWEPT-WING MODEL. Delwin R. Croom, C C. Shufflebarger, and Jarrett K. Huffman. June 1956. 26p. diagrs., photo. (NACA TN 3705)

(6.2)
Ice Formation

IMPINGEMENT OF CLOUD DROPLETS ON A CYLINDER AND PROCEDURE FOR MEASURING LIQUID-WATER CONTENT AND DROPLET SIZES IN SUPERCOOLED CLOUDS BY ROTATING MULTICYLINDER METHOD. R. J. Brun, W. Lewis, P. J. Perkins and J. S. Serafini. Appendix E: ALTERNATE METHOD OF REDUCING ROTATING MULTICYLINDER DATA. Paul T. Hacker. 1955. iv, 43p. diagrs., photos., tabs. (NACA Rept. 1215. Supersedes TN 2903; TN 2904; RM E53D23)

METEOROLOGICAL PROBLEMS ASSOCIATED WITH COMMERCIAL TUBOJET-AIRCRAFT OPERATION. A working group of the NACA Subcommittee on Meteorological Problems. June 1955. 46p. (NACA RM 54L29)

STATISTICAL SURVEY OF ICING DATA MEASURED ON SCHEDULED AIRLINE FLIGHTS OVER THE UNITED STATES AND CANADA FROM NOVEMBER 1951 TO JUNE 1952. Porter J. Perkins. September 1955. 44p. diagrs., photos., 2 tabs. (NACA RM E55F28a)

IMPINGEMENT OF WATER DROPLETS ON NACA 65A004 AIRFOIL AT 0° ANGLE OF ATTACK. Rinaldo J. Brun and Dorothea E. Vogt. November 1955. 28p. diagrs. (NACA TN 3586)

IMPINGEMENT OF WATER DROPLETS ON A SPHERE. Robert G. Dorsch, Paul G. Saper, and Charles F. Kadow. November 1955. 29p. diagrs., tab. (NACA TN 3587)

CLOUD-DROPLET INGESTION IN ENGINE INLETS WITH INLET VELOCITY RATIOS OF 1.0 AND 0.7. Rinaldo J. Brun. January 1956. 52p. diagrs., tab. (NACA TN 3593)

IMPINGEMENT OF WATER DROPLETS ON A RECTANGULAR HALF BODY IN A TWO-DIMENSIONAL INCOMPRESSIBLE FLOW FIELD. William Lewis and Rinaldo J. Brun. February 1956. 27p. diagrs., tabs. (NACA TN 3658)

(7)
OPERATING PROBLEMS

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OPERATING PROBLEMS

FLIGHT DETERMINATION OF THE EFFECTS OF RUDDER-PEDAL-FORCE CHARACTERISTICS ON THE AIMING ERROR IN AZIMUTH OF A CONVENTIONAL FIGHTER AIRPLANE. Lee Winograd and Rudolph D. Van Dyke, Jr. July 5, 1950. 32p. diagrs., photos., tab. (NACA RM A50D06)

THE VARIATION OF ATMOSPHERIC TURBULENCE WITH ALTITUDE AND ITS EFFECT ON AIRPLANE GUST LOADS. Robert L. McDougal, Thomas L. Coleman and Philip L. Smith. November 1953. 16p. diagrs., 2 tabs. (NACA RM L53G15a)

SOME DESIGN CONSIDERATIONS PERTINENT TO THE ROUGH-AIR BEHAVIOR OF AIRPLANES AT LOW ALTITUDE. Philip Donely and Clarence L. Gillis. November 1953. 21p. diagrs., tabs. (NACA RM L53J01b)

A REVISED GUST-LOAD FORMULA AND A RE-EVALUATION OF V-G DATA TAKEN ON CIVIL TRANSPORT AIRPLANES FROM 1933 TO 1950. Kermit G. Pratt and Walter G. Walker. 1954. ii, 9p. diagrs., tabs. (NACA Rept. 1206. Supersedes TN 2964; TN 3041)

SUMMARY EVALUATION OF TOOTHED-NOZZLE ATTACHMENTS AS A JET-NOISE-SUPPRESSION DEVICE. Warren J. North. July 1955. 19p. diagrs., photo. (NACA TN 3516)

AN ANALYSIS OF ACCELERATION, AIRSPEED, AND GUST-VELOCITY DATA FROM A FOUR-ENGINE TRANSPORT AIRPLANE IN OPERATIONS ON AN EASTERN UNITED STATES ROUTE. Thomas L. Coleman and Mary W. Fetner. September 1955. 20p. diagrs., 3 tabs. (NACA TN 3483)

AN ANALYSIS OF ACCELERATION, AIRSPEED, AND GUST-VELOCITY DATA FROM ONE TYPE OF FOUR-ENGINE TRANSPORT AIRPLANE OPERATED OVER TWO DOMESTIC ROUTES. Martin R. Copp and Thomas L. Coleman. October 1955. 29p. diagrs., tabs. (NACA TN 3475)

SUMMARY OF DERIVED GUST VELOCITIES OBTAINED FROM MEASUREMENTS WITHIN THUNDERSTORMS. H(arold) B. Tolefson. October 1955. 19p. diagrs., tabs. (NACA TN 3538)

EFFECT OF EXHAUST-NOZZLE EJECTORS ON TURBOJET NOISE GENERATION. Warren J. North and Willard D. Coles. October 1955. 26p. diagrs., photo. (NACA TN 3573)

HELICOPTER INSTRUMENT FLIGHT AND PRECISION MANEUVERS AS AFFECTED BY CHANGES IN DAMPING IN ROLL, PITCH, AND YAW. James B. Whitten, John P. Reeder, and Almer D. Crim. November 1955. 14p. diagrs., photos. (NACA TN 3537)

EFFECT OF CLIMB TECHNIQUE ON JET-TRANSPORT NOISE. Warren J. North. January 1956. 19p. diagrs. (NACA TN 3582)

INVESTIGATION OF FAR NOISE FIELD OF JETS. I - EFFECT OF NOZZLE SHAPE. Edmund E. Callaghan and Willard D. Coles. January 1956. 44p. diagrs., photos. (NACA TN 3590)

INVESTIGATION OF FAR NOISE FIELD OF JETS. II - COMPARISON OF AIR JETS AND JET ENGINES. Willard D. Coles and Edmund E. Callaghan. January 1956. 19p. diagrs., photos. (NACA TN 3591)

GUST-LOAD AND AIRSPEED DATA FROM ONE TYPE OF TWO-ENGINE AIRPLANE ON SIX CIVIL AIRLINE ROUTES FROM 1947 TO 1955. Walter G. Walker. February 1956. 25p. diagrs., tabs. (NACA TN 3621)

SUMMARY OF SCALE-MODEL THRUST-REVERSER INVESTIGATION. John H. Povolny, Fred W. Steffen, and Jack G. McArdle. February 1956. 49p. diagrs., photos. (NACA TN 3664)

PRELIMINARY FLIGHT SURVEY OF AERODYNAMIC NOISE ON AN AIRPLANE WING. Harold R. Mull and Joseph S. Algranti. March 1956. 8p. diagrs. (NACA RM E55K07)

INVESTIGATION OF THE EFFECT OF IMPACT DAMAGE ON FATIGUE STRENGTH OF JET-ENGINE COMPRESSOR ROTOR BLADES. Albert Kaufman and Andre J. Meyer, Jr. June 1956. 25p. diagrs., photos. (NACA TN 3275)

(7.1)
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METEOROLOGICAL PROBLEMS ASSOCIATED WITH COMMERCIAL TUBOJET-AIRCRAFT OPERATION. A working group of the NACA Subcommittee on Meteorological Problems. June 1955. 46p. (NACA RM 54L29)

PRELIMINARY DATA ON RAIN DEFLECTION FROM AIRCRAFT WINDSHIELDS BY MEANS OF HIGH-VELOCITY JET-AIR BLAST. Robert S. Ruggeri. July 1955. 17p. diagrs., photos. (NACA RM E55E17a)

FULL-SCALE PERFORMANCE STUDY OF A PROTOTYPE CRASH-FIRE PROTECTION SYSTEM FOR RECIPROCATING-ENGINE-POWERED AIRPLANES. Dugald O. Black and Jacob C. Moser. November 1955. 36p. diagrs., photos. (NACA RM E55B11)

PERFORMANCE AND OPERATIONAL STUDIES OF A FULL-SCALE JET-ENGINE THRUST REVERSER. Robert C. Kohl. April 1956. 38p. diagrs., photo. (NACA TN 3665)

(7.1.1)
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AERODYNAMIC MEASUREMENTS MADE DURING NAVY INVESTIGATION OF HUMAN TOLERANCE TO WIND BLASTS. Donald L. Loving. March 11, 1947. 34p. diagrs., photos., 2 tabs. (NACA RM L7C25)

(7.2)
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METEOROLOGICAL PROBLEMS ASSOCIATED WITH COMMERCIAL TUBOJET-AIRCRAFT OPERATION. A working group of the NACA Subcommittee on Meteorological Problems. June 1955. 46p. (NACA RM 54L29)

WIND-TUNNEL INVESTIGATION OF A NUMBER OF TOTAL-PRESSURE TUBES AT HIGH ANGLES OF ATTACK. SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS. William Gracey. May 1956. 30p. diagrs., tabs. (NACA TN 3641)

(7.3)
Ice Prevention and Removal

IMPINGEMENT OF CLOUD DROPLETS ON A CYLINDER AND PROCEDURE FOR MEASURING LIQUID-WATER CONTENT AND DROPLET SIZES IN SUPERCOOLED CLOUDS BY ROTATING MULTICYLINDER METHOD. R. J. Brun, W. Lewis, P. J. Perkins and J. S. Serafini. Appendix E: ALTERNATE METHOD OF REDUCING ROTATING MULTICYLINDER DATA. Paul T. Hacker. 1955. iv, 43p. diagrs., photos., tabs. (NACA Rept. 1215. Supersedes TN 2903; TN 2904; RM E53D23)

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IMPINGEMENT OF WATER DROPLETS ON A SPHERE. Robert G. Dorsch, Paul G. Saper, and Charles F. Kadow. November 1955. 29p. diagrs., tab. (NACA TN 3587)

AN OIL-STREAM PHOTOMICROGRAPHIC AEROSCOPE FOR OBTAINING CLOUD LIQUID-WATER CONTENT AND DROPLET SIZE DISTRIBUTIONS IN FLIGHT. Paul T. Hacker. January 1956. 36p. diagrs., photos., tabs. (NACA TN 3592)

IMPINGEMENT OF WATER DROPLETS ON A RECTANGULAR HALF BODY IN A TWO-DIMENSIONAL INCOMPRESSIBLE FLOW FIELD. William Lewis and Rinaldo J. Brun. February 1956. 27p. diagrs., tabs. (NACA TN 3658)

(7.3.1)
ENGINE INDUCTION SYSTEMS

CLOUD-DROPLET INGESTION IN ENGINE INLETS WITH INLET VELOCITY RATIOS OF 1.0 AND 0.7. Rinaldo J. Brun. January 1956. 52p. diagrs., tab. (NACA TN 3593)

(7.3.2)
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IMPINGEMENT OF WATER DROPLETS ON NACA 65A004 AIRFOIL AT 0° ANGLE OF ATTACK. Rinaldo J. Brun and Dorothea E. Vogt. November 1955. 28p. diagrs. (NACA TN 3586)

(7.3.3)
WINGS AND TAILS

IMPINGEMENT OF WATER DROPLETS ON NACA 65A004 AIRFOIL AT 0° ANGLE OF ATTACK. Rinaldo J. Brun and Dorothea E. Vogt. November 1955. 28p. diagrs. (NACA TN 3586)

EFFECT OF PNEUMATIC DE-ICERS AND ICE FORMATIONS ON AERODYNAMIC CHARACTERISTICS OF AN AIRFOIL. Dean T. Bowden. February 1956. 59p. diagrs., photos. (NACA TN 3564)

(7.3.4)
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PRELIMINARY DATA ON RAIN DEFLECTION FROM AIRCRAFT WINDSHIELDS BY MEANS OF HIGH-VELOCITY JET-AIR BLAST. Robert S. Ruggeri. July 1955. 17p. diagrs., photos. (NACA RM E55E17a)

(7.3.5)
MISCELLANEOUS ACCESSORIES

CLOUD-DROPLET INGESTION IN ENGINE INLETS WITH INLET VELOCITY RATIOS OF 1.0 AND 0.7. Rinaldo J. Brun. January 1956. 52p. diagrs., tab. (NACA TN 3593)

(7.3.6)
PROPULSION SYSTEMS

CLOUD-DROPLET INGESTION IN ENGINE INLETS WITH INLET VELOCITY RATIOS OF 1.0 AND 0.7. Rinaldo J. Brun. January 1956. 52p. diagrs., tab. (NACA TN 3593)

(7.4)
Noise

THEORETICAL AND EXPERIMENTAL INVESTIGATION OF MUFFLERS WITH COMMENTS ON ENGINE-EXHAUST MUFFLER DESIGN. Don D. Davis, Jr., George M. Stokes, Dewey Moore, and George L. Stevens, Jr. 1954. iv, 47p. diagrs., photos., tabs. (NACA Rept. 1192. Supersedes TN 2893; TN 2943)

A THEORETICAL STUDY OF THE EFFECT OF FORWARD SPEED ON THE FREE-SPACE SOUND-PRESSURE FIELD AROUND PROPELLERS. I. E. Garrick and Charles E. Watkins. 1954. ii, 16p. diagrs., tab. (NACA Rept. 1198. Supersedes TN 3018)

SHOCK-TURBULENCE INTERACTION AND THE GENERATION OF NOISE. H. S. Ribner. 1955. iii, 19p. diagrs., tab. (NACA Rept. 1233. Supersedes TN 3255)

METEOROLOGICAL PROBLEMS ASSOCIATED WITH COMMERCIAL TUBOJET-AIRCRAFT OPERATION. A working group of the NACA Subcommittee on Meteorological Problems. June 1955. 46p. (NACA RM 54L29)

ACOUSTICAL TREATMENT FOR THE NACA 8- BY 6-FOOT SUPERSONIC PROPULSION WIND TUNNEL. Leo L. Beranek, Samuel Labate and Uno Ingard, Bolt Beranek and Newman, Inc. June 1955. 86p. diagrs., photo., 7 tabs. (NACA TN 3378)

A STUDY OF THE RESPONSE OF PANELS TO RANDOM ACOUSTIC EXCITATION. Robert W. Hess, Leslie W. Lassiter and Harvey H. Hubbard. July 1955. 9p. diagrs. (NACA RM L55E13c)

NOISE SURVEY OF A 10-FOOT FOUR-BLADE TURBINE-DRIVEN PROPELLER UNDER STATIC CONDITIONS. Max C. Kurbjun. July 1955. 25p. diagrs., photo. (NACA TN 3422)

SUMMARY EVALUATION OF TOOTHED-NOZZLE ATTACHMENTS AS A JET-NOISE-SUPPRESSION DEVICE. Warren J. North. July 1955. 19p. diagrs., photo. (NACA TN 3516)

ACOUSTIC RADIATION FROM TWO-DIMENSIONAL RECTANGULAR CUTOUTS IN AERODYNAMIC SURFACES. K. Krishnamurty, California Institute of Technology. August 1955. 33p. diagrs., photos. (NACA TN 3487)

SOME MEASUREMENTS OF FLOW IN A RECTANGULAR CUTOUT. Anatol Roshko, California Institute of Technology. August 1955. 21p. diagrs. (NACA TN 3488)

INTENSITY, SCALE, AND SPECTRA OF TURBULENCE IN MIXING REGION OF FREE SUBSONIC JET. James C. Laurence. September 1955. 58p. diagrs., photo., tab. (NACA TN 3561)

SOUND PROPAGATION INTO THE SHADOW ZONE IN A TEMPERATURE-STRATIFIED ATMOSPHERE ABOVE A PLANE BOUNDARY. David C. Pridmore-Brown and Uno Ingard, Massachusetts Institute of Technology. October 1955. 57p. diagrs., photo. (NACA TN 3494)

STUDY OF SCREECHING COMBUSTION IN A 6-INCH SIMULATED AFTERBURNER. Perry L. Blackshear, Warren D. Rayle, and Leonard K. Tower. October 1955. 58p. diagrs., photos., tab. (NACA TN 3567)

EFFECT OF EXHAUST-NOZZLE EJECTORS ON TURBOJET NOISE GENERATION. Warren J. North and Willard D. Coles. October 1955. 26p. diagrs., photo. (NACA TN 3573)

A THEORETICAL ANALYSIS OF THE FIELD OF A RANDOM NOISE SOURCE ABOVE AN INFINITE PLANE. Peter A. Franken, Massachusetts Institute of Technology. November 1955. 20p. diagrs. (NACA TN 3557)

INSTRUMENTATION FOR MEASUREMENT OF FREE-SPACE SOUND PRESSURE IN THE IMMEDIATE VICINITY OF A PROPELLER IN FLIGHT. William D. Mace, Francis J. Haney, and Edmund A. Brummer. January 1956. 16p. diagrs., photo. (NACA TN 3534)

EFFECT OF CLIMB TECHNIQUE ON JET-TRANSPORT NOISE. Warren J. North. January 1956. 19p. diagrs. (NACA TN 3582)

INVESTIGATION OF FAR NOISE FIELD OF JETS. I - EFFECT OF NOZZLE SHAPE. Edmund E. Callaghan and Willard D. Coles. January 1956. 44p. diagrs., photos. (NACA TN 3590)

INVESTIGATION OF FAR NOISE FIELD OF JETS. II - COMPARISON OF AIR JETS AND JET ENGINES. Willard D. Coles and Edmund E. Callaghan. January 1956. 19p. diagrs., photos. (NACA TN 3591)

PRELIMINARY FLIGHT SURVEY OF AERODYNAMIC NOISE ON AN AIRPLANE WING. Harold R. Mull and Joseph S. Algranti. March 1956. 8p. diagrs. (NACA RM E55K07)

(7.7)
Piloting Techniques

FLIGHT DETERMINATION OF THE EFFECTS OF RUDDER-PEDAL-FORCE CHARACTERISTICS ON THE AIMING ERROR IN AZIMUTH OF A CONVENTIONAL FIGHTER AIRPLANE. Lee Winograd and Rudolph D. Van Dyke, Jr. July 5, 1950. 32p. diagrs., photos., tab. (NACA RM A50D06)

EFFECT OF FORMATION POSITION ON LOAD FACTORS OBTAINED ON F2H AIRPLANES. Carl R. Huss and Harold A. Hamer. December 1951. 15p. diagrs., 3 tabs. (NACA RM L51I05)

REVIEW AND INVESTIGATION OF UNSATISFACTORY CONTROL CHARACTERISTICS INVOLVING INSTABILITY OF PILOT-AIRPLANE COMBINATION AND METHODS FOR PREDICTING THESE DIFFICULTIES FROM GROUND TESTS. William H. Phillips, B. Porter Brown, and James T. Matthews, Jr. August 1953. 57p. diagrs., photos. (NACA RM L53F17a)

OPTIMUM FLIGHT PATHS OF TURBOJET AIRCRAFT. (Traiettorie Ottime Di Volo Degli Aeroplani Azionati Da Turboreattori). Angelo Miele. September 1955. 47p. diagrs., tabs. (NACA TM 1389. Trans. from L'Aerotecnica, v. 32, no. 4, 1952, p. 206-219)

GENERAL SOLUTIONS OF OPTIMUM PROBLEMS IN NONSTATIONARY FLIGHT. (Soluzioni Generali di Problemi di Ottimo in Volo Non-Stazionario). Angelo Miele. October 1955. 25p. diagrs., tab. (NACA TM 1388. Trans. from L'Aerotecnica, v.32, no.3, 1952, p.135-142)

PILOT'S LOSS OF ORIENTATION IN INVERTED SPINS. Stanley H. Scher. October 1955. 10p. diagrs., photos. (NACA TN 3531)

THE PROBLEM OF REDUCING THE SPEED OF A JET TRANSPORT IN FLIGHT. Don D. Davis, Jr. December 1955. 22p. diagrs. (NACA TN 3613)

(7.8)
Physiological

AERODYNAMIC MEASUREMENTS MADE DURING NAVY INVESTIGATION OF HUMAN TOLERANCE TO WIND BLASTS. Donald L. Loving. March 11, 1947. 34p. diagrs., photos., 2 tabs. (NACA RM L7C25)

(7.9)
Fire Hazards

FLAME PROPAGATION LIMITS OF PROPANE AND n-PENTANE IN OXIDES OF NITROGEN. Riley O. Miller. August 1955. 29p. diagrs., 3 tabs. (NACA TN 3520)

FULL-SCALE PERFORMANCE STUDY OF A PROTOTYPE CRASH-FIRE PROTECTION SYSTEM FOR RECIPROCATING-ENGINE-POWERED AIRPLANES. Dugald O. Black and Jacob C. Moser. November 1955. 36p. diagrs., photos. (NACA RM E55B11)

(7.10)
General

LIFT AND DRAG CHARACTERISTICS OF THE BELL X-5 RESEARCH AIRPLANE AT 59° SWEEPBACK FOR MACH NUMBERS FROM 0.60 TO 1.03. Donald R. Bellman. February 1953. 37p. diagrs., photos., tab. (NACA RM L53A09c)

CONSIDERATIONS IN THE ADAPTATION OF LOW-COST FUELS TO GAS-TURBINE-POWERED COMMERCIAL AIRCRAFT. Henry C. Barnett and Richard J. McCafferty. October 1953. 59p. diagrs., photo., 2 tabs. (NACA RM E53H05)

AN ANALYTICAL STUDY OF THE EFFECT OF AIRPLANE WAKE ON THE LATERAL DISPERSION OF AERIAL SPRAYS. Wilmer H. Reed, III. 1954. ii, 16p. diagrs., 3 tabs. (NACA Rept. 1196. Formerly TN 3032)

PRELIMINARY DATA ON RAIN DEFLECTION FROM AIRCRAFT WINDSHIELDS BY MEANS OF HIGH-VELOCITY JET-AIR BLAST. Robert S. Ruggeri. July 1955. 17p. diagrs., photos. (NACA RM E55E17a)

THE PROBLEM OF REDUCING THE SPEED OF A JET TRANSPORT IN FLIGHT. Don D. Davis, Jr. December 1955. 22p. diagrs. (NACA TN 3613)

INVESTIGATION OF FAR NOISE FIELD OF JETS. I - EFFECT OF NOZZLE SHAPE. Edmund E. Callaghan and Willard D. Coles. January 1956. 44p. diagrs., photos. (NACA TN 3590)

INVESTIGATION OF FAR NOISE FIELD OF JETS. II - COMPARISON OF AIR JETS AND JET ENGINES. Willard D. Coles and Edmund E. Callaghan. January 1956. 19p. diagrs., photos. (NACA TN 3591)

PRELIMINARY FLIGHT SURVEY OF AERODYNAMIC NOISE ON AN AIRPLANE WING. Harold R. Mull and Joseph S. Algranti. March 1956. 8p. diagrs. (NACA RM E55K07)

INVESTIGATION OF THE EFFECT OF IMPACT DAMAGE ON FATIGUE STRENGTH OF JET-ENGINE COMPRESSOR ROTOR BLADES. Albert Kaufman and André J. Meyer, Jr. June 1956. 25p. diagrs., photos. (NACA TN 3275)

(8)
INSTRUMENTS

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ROCKET-POWERED FLIGHT TEST OF A ROLL-STABILIZED SUPERSONIC MISSILE CONFIGURATION. Robert A. Gardiner and Jacob Zarovsky. January 12, 1950. 32p. diagrs., photos., tab. (NACA RM L9K01a)

FLIGHT INVESTIGATION OF A ROLL-STABILIZED MISSILE CONFIGURATION AT VARYING ANGLES OF ATTACK AT MACH NUMBERS BETWEEN 0.8 AND 1.79. Jacob Zarovsky and Robert A. Gardiner. March 6, 1951. 38p. diagrs., photos., tab. (NACA RM L50H21)

METEOROLOGICAL PROBLEMS ASSOCIATED WITH COMMERCIAL TUBOJET-AIRCRAFT OPERATION. A working group of the NACA Subcommittee on Meteorological Problems. June 1955. 46p. (NACA RM 54L29)

INTENSITY, SCALE, AND SPECTRA OF TURBULENCE IN MIXING REGION OF FREE SUBSONIC JET. James C. Laurence. September 1955. 58p. diagrs., photo., tab. (NACA TN 3561)

AVERAGING OF PERIODIC PRESSURE PULSATIONS BY A TOTAL-PRESSURE PROBE. R. C. Johnson. October 1955. 30p. diagrs., photo., tabs. (NACA TN 3568)

INSTRUMENTATION FOR MEASUREMENT OF FREE-SPACE SOUND PRESSURE IN THE IMMEDIATE VICINITY OF A PROPELLER IN FLIGHT. William D. Mace, Francis J. Haney, and Edmund A. Brummer. January 1956. 16p. diagrs., photo. (NACA TN 3534)

(8.1)
Flight

FLIGHT CALIBRATION OF ANGLE-OF-ATTACK AND SIDESLIP DETECTORS ON THE FUSELAGE OF A 35° SWEPT-WING FIGHTER AIRPLANE. Norman M. McFadden, George A. Rathert, Jr., and Richard S. Bray. February 1952. 26p. diagrs., photos. (NACA RM A52A04)

COMPARISON OF MEASURED AND PREDICTED INDICATED ANGLES OF ATTACK NEAR THE FUSELAGES OF A TRIANGULAR-WING WIND-TUNNEL MODEL AND A SWEPT-WING FIGHTER AIRPLANE IN FLIGHT. Norman M. McFadden, John L. McCloud, III, and Harry A. James. March 1953. 13p. diagrs. (NACA RM A53A15)

AN AIR-FLOW-DIRECTION PICKUP SUITABLE FOR TELEMETERING USE ON PILOTLESS AIRCRAFT. Wallace L. Ikard. March 1954. 25p. diagrs., photos. (NACA RM L53K16)

WIND-TUNNEL INVESTIGATION OF A SHIELDED TOTAL-PRESSURE TUBE AT A MACH NUMBER OF 1.61. Walter R. Russell and William Gracey. March 1954. 9p. diagrs., photo. (NACA RM L53L23a)

RECOVERY AND TIME-RESPONSE CHARACTERISTICS OF SIX THERMOCOUPLE PROBES IN SUBSONIC AND SUPERSONIC FLOW. Truman M. Stickney. July 1955. 25p. diagrs., photos., 2 tabs. (NACA TN 3455)

FLIGHT CALIBRATION OF FOUR AIRSPEED SYSTEMS ON A SWEPT-WING AIRPLANE AT MACH NUMBERS UP TO 1.04 BY THE NACA RADAR-PHOTOTHEODOLITE METHOD. Jim Rogers Thompson, Richard S. Bray, and George E. Cooper. November 1955. 41p. diagrs., photos., tab. (NACA TN 3526. Supersedes RM A50H24)

INSTRUMENTATION FOR MEASUREMENT OF FREE-SPACE SOUND PRESSURE IN THE IMMEDIATE VICINITY OF A PROPELLER IN FLIGHT. William D. Mace, Francis J. Haney, and Edmund A. Brummer. January 1956. 16p. diagrs., photo. (NACA TN 3534)

AN OIL-STREAM PHOTOMICROGRAPHIC AEROSCOPE FOR OBTAINING CLOUD LIQUID-WATER CONTENT AND DROPLET SIZE DISTRIBUTIONS IN FLIGHT. Paul T. Hacker. January 1956. 36p. diagrs., photos., tabs. (NACA TN 3592)

ERROR IN AIRSPEED MEASUREMENT DUE TO THE STATIC-PRESSURE FIELD AHEAD OF AN AIRPLANE AT TRANSONIC SPEEDS. Thomas C. O'Bryan, Edward C. B. Danforth, and J. Ford Johnston. February 1956. 13p. diagrs., photos. (NACA Rept. 1239. Supersedes RM L9C25; RM L50L28; RM L52A17)

IMPINGEMENT OF WATER DROPLETS ON A RECTANGULAR HALF BODY IN A TWO-DIMENSIONAL INCOMPRESSIBLE FLOW FIELD. William Lewis and Rinaldo J. Brun. February 1956. 27p. diagrs., tabs. (NACA TN 3658)

WIND-TUNNEL INVESTIGATION OF A NUMBER OF TOTAL-PRESSURE TUBES AT HIGH ANGLES OF ATTACK. SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS. William Gracey. May 1956. 30p. diagrs., tabs. (NACA TN 3641)

A SONIC-FLOW ORIFICE PROBE FOR THE IN-FLIGHT MEASUREMENT OF TEMPERATURE PROFILES OF A JET ENGINE EXHAUST WITH AFTERBURNING. C. Dewey Havill and L. Stewart Rolls. May 1956. 18p. diagrs., photos. (NACA TN 3714)

(8.2)
Laboratory

RECOVERY AND TIME-RESPONSE CHARACTERISTICS OF SIX THERMOCOUPLE PROBES IN SUBSONIC AND SUPERSONIC FLOW. Truman M. Stickney. July 1955. 25p. diagrs., photos., 2 tabs. (NACA TN 3455)

AN AUTOMATIC VISCOMETER FOR NON-NEWTONIAN MATERIALS. Ruth N. Weltmann and Perry W. Kuhns. August 1955. 34p. diagrs., photos., tab. (NACA TN 3510)

RESPONSE OF HOMOGENEOUS AND TWO-MATERIAL LAMINATED CYLINDERS TO SINUSOIDAL ENVIRONMENTAL TEMPERATURE CHANGE, WITH APPLICATIONS TO HOT-WIRE ANEMOMETRY AND THERMOCOUPLE PYROMETRY. Herman H. Lowell and Norman (A.) Patton. September 1955. ii, 143p. diagrs., tabs. (NACA TN 3514)

HEAT LOSS FROM YAWED HOT WIRES AT SUBSONIC MACH NUMBERS. Virgil A. Sandborn and James C. Laurence. September 1955. 44p. diagrs., photo. (NACA TN 3563)

STUDY OF SCREECHING COMBUSTION IN A 6-INCH SIMULATED AFTERBURNER. Perry L. Blackshear, Warren D. Rayle, and Leonard K. Tower. October 1955. 58p. diagrs., photos., tab. (NACA TN 3567)

AN OIL-STREAM PHOTOMICROGRAPHIC AEROSCOPE FOR OBTAINING CLOUD LIQUID-WATER CONTENT AND DROPLET SIZE DISTRIBUTIONS IN FLIGHT. Paul T. Hacker. January 1956. 36p. diagrs., photos., tabs. (NACA TN 3592)

TIME CORRELATOR FOR PROBLEMS IN AERODYNAMICS. George Tolmie Skinner, California Institute of Technology. June 1956. 32p. diagrs. (NACA TN 3682)

APPLICATION OF SCATTERING THEORY TO THE MEASUREMENT OF TURBULENT DENSITY FLUCTUATIONS BY AN OPTICAL METHOD. Howard A. Stine and Warren Winovich. June 1956. 21p. diagrs., (NACA TN 3719)

AN EVALUATION OF FOUR EXPERIMENTAL METHODS FOR MEASURING MEAN PROPERTIES OF A SUPERSONIC TURBULENT BOUNDARY LAYER. George J. Nothwang. June 1956. 34p. diagrs., photos. (NACA TN 3721)

(8.3)
Meteorological

AN OIL-STREAM PHOTOMICROGRAPHIC AEROSCOPE FOR OBTAINING CLOUD LIQUID-WATER CONTENT AND DROPLET SIZE DISTRIBUTIONS IN FLIGHT. Paul T. Hacker. January 1956. 36p. diagrs., photos., tabs. (NACA TN 3592)

IMPINGEMENT OF WATER DROPLETS ON A RECTANGULAR HALF BODY IN A TWO-DIMENSIONAL INCOMPRESSIBLE FLOW FIELD. William Lewis and Rinaldo J. Brun. February 1956. 27p. diagrs., tabs. (NACA TN 3658)

(9)
RESEARCH EQUIPMENT AND TECHNIQUES

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AN NACA TRANSONIC TEST SECTION WITH TAPERED SLOTS TESTED AT MACH NUMBERS TO 1.26. Vernon G. Ward, Charles F. Whitcomb, and Merwin D. Pearson. March 30, 1950. 19p. diagrs., photos., tab. (NACA RM L50B14)

PRESSURE DISTRIBUTIONS AT MACH NUMBERS FROM 0.6 TO 1.9 MEASURED IN FREE FLIGHT ON A PARABOLIC BODY OF REVOLUTION WITH SHARPLY CONVERGENT AFTERBODY. William E. Stoney, Jr. April 1952. 34p. diagrs., photos. (NACA RM L51L03)

NACA TRANSONIC WIND-TUNNEL TEST SECTIONS. Ray H. Wright and Vernon G. Ward. 1955. ii, 38p. diagrs., photos., tabs. (NACA Rept. 1231. Supersedes RM L8J06)

ACOUSTICAL TREATMENT FOR THE NACA 8- BY 6-FOOT SUPERSONIC PROPULSION WIND TUNNEL. Leo L. Beranek, Samuel Labate and Uno Ingard, Bolt Beranek and Newman, Inc. June 1955. 86p. diagrs., photo., 7 tabs. (NACA TN 3378)

ANALYSIS OF A SPIN AND RECOVERY FROM TIME HISTORIES OF ATTITUDES AND VELOCITIES AS DETERMINED FOR A DYNAMIC MODEL OF A CONTEMPORARY FIGHTER AIRPLANE IN THE FREE-SPINNING TUNNEL. Stanley H. Scher. April 1956. 54p. diagrs., photos., tabs. (NACA TN 3611)

MEASUREMENT OF AERODYNAMIC FORCES FOR VARIOUS MEAN ANGLES OF ATTACK ON AN AIRFOIL OSCILLATING IN PITCH AND ON TWO FINITE-SPAN WINGS OSCILLATING IN BENDING WITH EMPHASIS ON DAMPING IN THE STALL. A. Gerald Rainey. May 1956. i, 66p. diagrs., photo. (NACA TN 3643)

TIME CORRELATOR FOR PROBLEMS IN AERODYNAMICS. George Tolmie Skinner, California Institute of Technology. June 1956. 32p. diagrs. (NACA TN 3682)

(9.1) Equipment

AN NACA TRANSONIC TEST SECTION WITH TAPERED SLOTS TESTED AT MACH NUMBERS TO 1.26. Vernon G. Ward, Charles F. Whitcomb, and Merwin D. Pearson. March 30, 1950. 19p. diagrs., photos., tab. (NACA RM L50B14)

DYNAMIC STABILITY AND CONTROL CHARACTERISTICS OF A VERTICALLY RISING AIRPLANE MODEL IN HOVERING FLIGHT. William R. Bates, Powell M. Lovell, Jr., and Charles C. Smith, Jr. February 23, 1951. 16p. diagrs., photos., tab. (NACA RM L50J16)

EFFECT OF THE PROXIMITY OF THE GROUND ON THE STABILITY AND CONTROL CHARACTERISTICS OF A VERTICALLY RISING AIRPLANE MODEL IN THE HOVERING CONDITION. Charles C. Smith, Jr., Powell M. Lovell, Jr., and William R. Bates. September 1951. 16p. diagrs., tab. (NACA RM L51G05)

ADDITIONAL STUDIES OF THE STABILITY AND CONTROLLABILITY OF AN UNSWEPT-WING VERTICALLY RISING AIRPLANE MODEL IN HOVERING FLIGHT INCLUDING STUDIES OF VARIOUS TETHERED LANDING TECHNIQUES. William R. Bates, Powell M. Lovell, Jr., and Charles C. Smith, Jr. November 1951. 25p. diagrs., photos., tab. (NACA RM L51I07a)

WIND-TUNNEL INVESTIGATION OF THE EFFECTS OF STEADY ROLLING ON THE AERODYNAMIC LOADING CHARACTERISTICS OF A 45^{0} SWEPT-BACK WING AT HIGH SUBSONIC SPEEDS. James W. Wiggins and Richard E. Kuhn. November 1953. 22p. diagrs., photos. (NACA RM L53J01a)

A STUDY OF THE CHARACTERISTICS OF HUMAN-PILOT CONTROL RESPONSE TO SIMULATED AIRCRAFT LATERAL MOTIONS. Donald C. Cheatham. 1954. ii, 14p. diagrs., photos., tab. (NACA Rept. 1197. Formerly RM L52C17)

DEVELOPMENT OF TURBULENCE-MEASURING EQUIPMENT. Leslie S. G. Kovásznay, John Hopkins University. 1954. ii, 30p. diagrs., photos., tab. (NACA Rept. 1209. Supersedes TN 2839)

AN INVESTIGATION OF A METHOD FOR OBTAINING HYDRODYNAMIC DATA AT VERY HIGH SPEEDS WITH A FREE WATER JET. Bernard Weinflash and John R. McGehee. June 1954. 28p. diagrs., photos., tabs. (NACA RM L54D23)

NACA TRANSONIC WIND-TUNNEL TEST SECTIONS. Ray H. Wright and Vernon G. Ward. 1955. ii, 38p. diagrs., photos., tabs. (NACA Rept. 1231. Supersedes RM L8J06)

DOWNWASH SURVEY BEHIND TWO LOW-ASPECT-RATIO VARIABLE-INCIDENCE WINGS IN COMBINATION WITH THREE DIFFERENT SIZE FUSELAGES AT A MACH NUMBER OF 0.25. Edward J. Hopkins and Norman E. Sorensen. March 1955. 54p. diagrs., photos., tab. (NACA RM A55A07)

PRACTICAL CONSIDERATIONS IN SPECIFIC APPLICATIONS OF GAS-FLOW INTERFEROMETRY. Walton L. Howes and Donald R. Buchele. July 1955. ii, 95p. diagrs., photos. (NACA TN 3507)

MEASUREMENTS OF TURBULENT SKIN FRICTION ON A FLAT PLATE AT TRANSONIC SPEEDS. Raimo J(aakko) Hakkinen, California Institute of Technology. September 1955. 41p. diagrs., photo., tabs. (NACA TN 3486)

A METHOD FOR OBTAINING STATISTICAL DATA ON AIRPLANE VERTICAL VELOCITY AT GROUND CONTACT FROM MEASUREMENTS OF CENTER-OF-GRAVITY ACCELERATION. Robert C. Dreher. February 1956. 21p. diagrs., photo., tabs. (NACA TN 3541)

MEASUREMENTS OF ATMOSPHERIC TURBULENCE OVER A WIDE RANGE OF WAVELENGTH FOR ONE METEOROLOGICAL CONDITION. Harold L. Crane and Robert G. Chilton. June 1956. 18p. diagrs., photo. (NACA TN 3702)

(9.1.1) WIND TUNNELS

AN NACA TRANSONIC TEST SECTION WITH TAPERED SLOTS TESTED AT MACH NUMBERS TO 1.26. Vernon G. Ward, Charles F. Whitcomb, and Merwin D. Pearson. March 30, 1950. 19p. diagrs., photos., tab. (NACA RM L50B14)

PRESSURE MEASUREMENTS ON A BODY OF REVOLUTION IN THE LANGLEY 16-FOOT TRANSONIC TUNNEL AND A COMPARISON WITH FREE-FALL DATA. Joseph M. Hallissy, Jr. March 1952. 19p. diagrs. (NACA RM L51L07a)

AN EXPERIMENTAL INVESTIGATION OF BOUNDARY INTERFERENCE ON FORCE AND MOMENT CHARACTERISTICS OF LIFTING MODELS IN THE LANGLEY 16- AND 8-FOOT TRANSONIC TUNNELS. Charles F. Whitcomb and Robert S. Osborne. February 1953. 31p. photos., diagrs., tab. (NACA RM L52L29)

A PRELIMINARY INVESTIGATION OF THE POWER REQUIREMENTS OF SLOTTED TEST SECTIONS. John S. Dennard. July 1953. 32p. diagrs. (NACA RM L53F10)

SLOTTED-BOUNDARY INTERFERENCE EFFECTS ON WEDGE AIRFOILS AT LOW SUPERSONIC MACH NUMBERS. William J. Nelson and Allen R. Vick. July 1953. 27p. diagrs., photos. (NACA RM L53F11)

AN EXPERIMENTAL INVESTIGATION OF THE TRANSONIC-FLOW-GENERATION AND SHOCK-WAVE-REFLECTION CHARACTERISTICS OF A TWO-DIMENSIONAL WIND TUNNEL WITH 17-PERCENT-OPEN PERFORATED WALLS. Don D. Davis, Jr., Thomas B. Sellers, and George M. Stokes. April 1954. 40p. diagrs., photos. (NACA RM L54B15a)

A FREE-FLIGHT WIND TUNNEL FOR AERODYNAMIC TESTING AT HYPERSONIC SPEEDS. Alvin Seiff. 1955. ii, 17p. diagrs., photos. (NACA Rept. 1222. Supersedes RM A52A24)

NACA TRANSONIC WIND-TUNNEL TEST SECTIONS. Ray H. Wright and Vernon G. Ward. 1955. ii, 38p. diagrs., photos., tabs. (NACA Rept. 1231. Supersedes RM L8J06)

THEORETICAL AND EXPERIMENTAL INVESTIGATION OF THE EFFECT OF TUNNEL WALLS ON THE FORCES ON AN OSCILLATING AIRFOIL IN TWO-DIMENSIONAL SUBSONIC COMPRESSIBLE FLOW. Harry L. Runyan, Donald S. Woolston and A. Gerald Rainey. June 1955. 41p. diagrs., photo. (NACA TN 3416. Supersedes and extends RM L52I17a)

INVESTIGATION OF THE EFFECT OF SHORT FIXED DIFFUSERS ON STARTING BLOWDOWN JETS IN THE MACH NUMBER RANGE FROM 2.7 TO 4.5. John A. Moore. January 1956. 32p. diagrs., photos. (NACA TN 3545)

EFFECT OF THICKNESS, CAMBER, AND THICKNESS DISTRIBUTION ON AIRFOIL CHARACTERISTICS AT MACH NUMBERS UP TO 1.0. Bernard N. Daley and Richard S. Dick. March 1956. 75p. diagrs., photos., tab. (NACA TN 3607. Supersedes RM L52G31a)

INVESTIGATION OF THE USE OF THE THERMAL DECOMPOSITION OF NITROUS OXIDE TO PRODUCE HYPERSONIC FLOW OF A GAS CLOSLY RESEMBLING AIR. Alexander P. Sabol and John S. Evans. March 1956. 36p. diagrs., tabs. (NACA TN 3624)

INVESTIGATION OF BOUNDARY-LAYER TRANSITION ON 10° CONE IN LANGLEY 4- BY 4-FOOT SUPERSONIC PRESSURE TUNNEL AT MACH NUMBERS OF 1.41, 1.61, AND 2.01. Archibald R. Sinclair and K. R. Czarnecki. May 1956. 17p. diagrs., photos. (NACA TN 3648)

(9.1.2)
FREE-FLIGHT

FLIGHT INVESTIGATION TO DETERMINE THE HINGE MOMENTS OF A BEVELED-EDGE AILERON ON A 45° SWEPTBACK WING AT TRANSONIC AND LOW SUPERSONIC SPEEDS. William N. Gardner and Howard J. Curfman, Jr. November 12, 1947. 20p. diagrs., photos. (NACA RM L7H26)

ROCKET-POWERED FLIGHT TEST OF A ROLL-STABILIZED SUPERSONIC MISSILE CONFIGURATION. Robert A. Gardiner and Jacob Zarovsky. January 12, 1950. 32p. diagrs., photos., tab. (NACA RM L9K01a)

FLIGHT INVESTIGATION OF A ROLL-STABILIZED MISSILE CONFIGURATION AT VARYING ANGLES OF ATTACK AT MACH NUMBERS BETWEEN 0.8 AND 1.79. Jacob Zarovsky and Robert A. Gardiner. March 6, 1951. 38p. diagrs., photos., tab. (NACA RM L50H21)

FLIGHT CALIBRATION OF ANGLE-OF-ATTACK AND SIDESLIP DETECTORS ON THE FUSELAGE OF A 35° SWEPT-WING FIGHTER AIRPLANE. Norman M. McFadden, George A. Rathert, Jr., and Richard S. Bray. February 1952. 26p. diagrs., photos. (NACA RM A52A04)

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WIND-TUNNEL INVESTIGATION OF A SHIELDED TOTAL-PRESSURE TUBE AT A MACH NUMBER OF 1.61. Walter R. Russell and William Gracey. March 1954. 9p. diagrs., photo. (NACA RM L53L23a)

A FREE-FLIGHT WIND TUNNEL FOR AERODYNAMIC TESTING AT HYPERSONIC SPEEDS. Alvin Seiff. 1955. ii, 17p. diagrs., photos. (NACA Rept. 1222. Supersedes RM A52A24)

FLIGHT CALIBRATION OF FOUR AIRSPEED SYSTEMS ON A SWEPT-WING AIRPLANE AT MACH NUMBERS UP TO 1.04 BY THE NACA RADAR-PHOTOTHEODOLITE METHOD. Jim Rogers Thompson, Richard S. Bray, and George E. Cooper. November 1955. 41p. diagrs., photos., tab. (NACA TN 3526. Supersedes RM A50H24)

WIND-TUNNEL INVESTIGATION OF A NUMBER OF TOTAL-PRESSURE TUBES AT HIGH ANGLES OF ATTACK. SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS. William Gracey. May 1956. 30p. diagrs., tabs. (NACA TN 3641)

(9.1.4)
PROPULSION RESEARCH EQUIPMENT

FREE-JET TESTS OF A 6.5-INCH-DIAMETER RAM-JET ENGINE AT MACH NUMBERS OF 1.81 AND 2.00. Maxime A. Faget, Raymond S. Watson, and Walter A. Bartlett, Jr. March 7, 1951. 38p. diagrs., photos. (NACA RM L50L06)

FREE-JET TESTS OF A 1.1-INCH-DIAMETER SUPERSONIC RAM-JET ENGINE. Joseph H. Judd and Otto F. Trout, Jr. March 1952. 24p. diagrs., photos., tabs. (NACA RM L51L18)

TECHNIQUES FOR DETERMINING THRUST IN FLIGHT FOR AIRPLANES EQUIPPED WITH AFTERBURNERS. L. Stewart Rolls, C. Dewey Havill, and George R. Holden. January 1953. 27p. diagrs., photos. (NACA RM A52K12)

ACOUSTICAL TREATMENT FOR THE NACA 8- BY 6-FOOT SUPERSONIC PROPULSION WIND TUNNEL. Leo L. Beranek, Samuel Labate and Uno Ingard, Bolt Beranek and Newman, Inc. June 1955. 86p. diagrs., photo., 7 tabs. (NACA TN 3378)

NOISE SURVEY OF A 10-FOOT FOUR-BLADE TURBINE-DRIVEN PROPELLER UNDER STATIC CONDITIONS. Max C. Kurbjun. July 1955. 25p. diagrs., photo. (NACA TN 3422)

A SONIC-FLOW ORIFICE PROBE FOR THE IN-FLIGHT MEASUREMENT OF TEMPERATURE PROFILES OF A JET ENGINE EXHAUST WITH AFTERBURNING. C. Dewey Havill and L. Stewart Rolls. May 1956. 18p. diagrs., photos. (NACA TN 3714)

(9.1.6)
MATERIALS

AXIAL-LOAD FATIGUE PROPERTIES OF 24S-T AND 75S-T ALUMINUM ALLOY AS DETERMINED IN SEVERAL LABORATORIES. H. J. Grover and W. S. Hyler, Battelle Memorial Institute, Paul Kuhn and Charles B. Landers, Langley Aeronautical Laboratory and F. M. Howell, Aluminum Company of America. 1954. ii, 25p. diagrs., photos., 7 tabs. (NACA Rept. 1190. Formerly TN 2928)

PERFORATED SHEETS AS A POROUS MATERIAL FOR DISTRIBUTED SUCTION AND INJECTION. Robert E. Dannenberg, Bruno J. Gambucci, and James A. Weiberg. April 1956. 27p. diagrs., photos. (NACA TN 3669)

(9.1.7)
STRUCTURES

CREEP AND CREEP-RUPTURE CHARACTERISTICS OF SOME RIVETED AND SPOT-WELDED LAP JOINTS OF AIRCRAFT MATERIALS. Leonard Mordfin, National Bureau of Standards. June 1955. 53p. diagrs., photos., 6 tabs. (NACA TN 3412)

RAPID RADIANT-HEATING TESTS OF MULTIWEB BEAMS. Joseph N. Kotanchik, Aldie E. Johnson, Jr., and Robert D. Ross. September 1955. 30p. diagrs., photos., tab. (NACA TN 3474)

(9.2) Technique

THE LONGITUDINAL STABILITY, CONTROL EFFECTIVENESS, AND CONTROL HINGE-MOMENT CHARACTERISTICS OBTAINED FROM A FLIGHT INVESTIGATION OF A CANARD MISSILE CONFIGURATION AT TRANSONIC AND SUPERSONIC SPEEDS. Roy J. Niewald and Martin T. Moul. November 24, 1950. 43p. diagrs., photos. (NACA RM L50I27)

DYNAMIC STABILITY AND CONTROL CHARACTERISTICS OF A VERTICALLY RISING AIRPLANE MODEL IN HOVERING FLIGHT. William R. Bates, Powell M. Lovell, Jr., and Charles C. Smith, Jr. February 23, 1951. 16p. diagrs., photos., tab. (NACA RM L50J16)

EFFECT OF THE PROXIMITY OF THE GROUND ON THE STABILITY AND CONTROL CHARACTERISTICS OF A VERTICALLY RISING AIRPLANE MODEL IN THE HOVERING CONDITION. Charles C. Smith, Jr., Powell M. Lovell, Jr., and William R. Bates. September 1951. 16p. diagrs., tab. (NACA RM L51G05)

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IGNITION DELAY EXPERIMENTS WITH SMALL-SCALE ROCKET ENGINE AT SIMULATED ALTITUDE CONDITIONS USING VARIOUS FUELS WITH NITRIC ACID OXIDANTS. Dezso J. Ladanyi. January 1952. 44p. diagrs., photos., tabs. (NACA RM E51J01)

A PRELIMINARY WIND-TUNNEL INVESTIGATION OF FLUTTER CHARACTERISTICS OF DELTA WINGS. Robert W. Herr. April 1952. 35p. diagrs., tabs. (NACA RM L52B14a)

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RESULTS OF TWO EXPERIMENTS ON FLUTTER OF HIGH-ASPECT-RATIO SWEPT WINGS IN THE TRANSONIC SPEED RANGE. W. T. Lauten, Jr. and Burke R. O'Kelly. July 1952. 22p. diagrs., photos., tabs. (NACA RM L52D24b)

EFFECTS OF STABILIZING FINS AND A REAR-SUPPORT STING ON THE BASE PRESSURES OF A BODY OF REVOLUTION IN FREE FLIGHT AT MACH NUMBERS FROM 0.7 TO 1.3. Roger G. Hart. September 1952. 19p. diagrs., photos., tab. (NACA RM L52E06)

INVESTIGATIONS AT SUPERSONIC SPEEDS OF THE BASE PRESSURE ON BODIES OF REVOLUTION WITH AND WITHOUT SWEPTBACK STABILIZING FINS. Eugene S. Love and Robert M. O'Donnell. December 1952. 66p. diagrs., photos. (NACA RM L52J21a)

TECHNIQUES FOR DETERMINING THRUST IN FLIGHT FOR AIRPLANES EQUIPPED WITH AFTERBURNERS. L. Stewart Rolls, C. Dewey Havill, and George R. Holden. January 1953. 27p. diagrs., photos. (NACA RM A52K12)

AN AUTOMATIC VISCOMETER FOR NON-NEWTONIAN MATERIALS. Ruth N. Weltmann and Perry W. Kuhns. August 1955. 34p. diagrs., photos., tab. (NACA TN 3510)

ANALYSIS OF THE HORIZONTAL-TAIL LOADS MEASURED IN FLIGHT ON A MULTIENGINE JET BOMBER. William S. Aiken, Jr. and Bernard Wiener. September 1955. i, 69p. diagrs., photo., 6 tabs. (NACA TN 3479)

ACOUSTICS OF A NONHOMOGENEOUS MOVING MEDIUM. (Akustika Neodnorodnoi Dvizhushcheisya Sredy). D. I. Blokhintsev. February 1956. 194p. diagrs., photos. (NACA TM 1399. Trans. of Russian Book, 1946)

INVESTIGATION OF THE USE OF THE THERMAL DECOMPOSITION OF NITROUS OXIDE TO PRODUCE HYPERSONIC FLOW OF A GAS CLOSLY RESEMBLING AIR. Alexander P. Sabol and John S. Evans. March 1956. 36p. diagrs., tabs. (NACA TN 3624)

APPLICATION OF SCATTERING THEORY TO THE MEASUREMENT OF TURBULENT DENSITY FLUCTUATIONS BY AN OPTICAL METHOD. Howard A. Stine and Warren Winovich. June 1956. 21p. diagrs., (NACA TN 3719)

(9.2.1) CORRECTIONS

LIFT AND PITCHING-MOMENT INTERFERENCE BETWEEN A POINTED CYLINDRICAL BODY AND TRIANGULAR WINGS OF VARIOUS ASPECT RATIOS AT MACH NUMBERS OF 1.50 AND 2.02. Jack N. Nielsen, Elliott D. Katzen, and Kenneth K. Tang. September 12, 1950. 53p. diagrs., photos., tabs. (NACA RM A50F06)

FLIGHT CALIBRATION OF ANGLE-OF-ATTACK AND SIDESLIP DETECTORS ON THE FUSELAGE OF A 35° SWEPT-WING FIGHTER AIRPLANE. Norman M. McFadden, George A. Rathert, Jr., and Richard S. Bray. February 1952. 26p. diagrs., photos. (NACA RM A52A04)

PRESSURE MEASUREMENTS ON A BODY OF REVOLUTION IN THE LANGLEY 16-FOOT TRANSONIC TUNNEL AND A COMPARISON WITH FREE-FALL DATA. Joseph M. Hallissy, Jr. March 1952. 19p. diagrs. (NACA RM L51L07a)

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COMPARISON OF LIFT-CURVE SLOPES FOR A MODEL TESTED IN TWO SLOTTED TUNNELS OF DIFFERENT SIZES AT HIGH SUBSONIC SPEEDS. Robert W. Boswinkle, Jr. June 1953. 13p. diagrs. (NACA RM L53E20a)

AN INVESTIGATION OF A METHOD FOR OBTAINING HYDRODYNAMIC DATA AT VERY HIGH SPEEDS WITH A FREE WATER JET. Bernard Weinflash and John R McGehee. June 1954. 28p. diagrs., photos., tabs. (NACA RM L54D23)

THEORETICAL STUDY OF THE TUNNEL-BOUNDARY LIFT INTERFERENCE DUE TO SLOTTED WALLS IN THE PRESENCE OF THE TRAILING-VORTEX SYSTEM OF A LIFTING MODEL. Clarence W. Matthews. 1955. ii, 19p. diagrs. (NACA Rept. 1221. Supersedes RM L53A26)

THEORETICAL AND EXPERIMENTAL INVESTIGATION OF THE EFFECT OF TUNNEL WALLS ON THE FORCES ON AN OSCILLATING AIRFOIL IN TWO-DIMENSIONAL SUBSONIC COMPRESSIBLE FLOW. Harry L. Runyan, Donald S. Woolston and A. Gerald Rainey. June 1955. 41p. diagrs., photo. (NACA TN 3416. Supersedes and extends RM L52I17a)

PRACTICAL CONSIDERATIONS IN SPECIFIC APPLICATIONS OF GAS-FLOW INTERFEROMETRY. Walton L. Howes and Donald R. Buchele. July 1955. ii, 95p. diagrs., photos. (NACA TN 3507)

AVERAGING OF PERIODIC PRESSURE PULSATIONS BY A TOTAL-PRESSURE PROBE. R. C. Johnson. October 1955. 30p. diagrs., photo., tabs. (NACA TN 3568)

FLIGHT CALIBRATION OF FOUR AIRSPEED SYSTEMS ON A SWEPT-WING AIRPLANE AT MACH NUMBERS UP TO 1.04 BY THE NACA RADAR-PHOTOTHEODOLITE METHOD. Jim Rogers Thompson, Richard S. Bray, and George E. Cooper. November 1955. 41p. diagrs., photos., tab. (NACA TN 3526. Supersedes RM A50H24)

ERROR IN AIRSPEED MEASUREMENT DUE TO THE STATIC-PRESSURE FIELD AHEAD OF AN AIRPLANE AT TRANSONIC SPEEDS. Thomas C. O'Bryan, Edward C. B. Danforth, and J. Ford Johnston. February 1956. 13p. diagrs., photos. (NACA Rept. 1239. Supersedes RM L9C25; RM L50L28; RM L52A17)

WIND-TUNNEL INVESTIGATION OF A NUMBER OF TOTAL-PRESSURE TUBES AT HIGH ANGLES OF ATTACK. SUBSONIC, TRANSONIC, AND SUPERSONIC SPEEDS. William Gracey. May 1956. 30p. diagrs., tabs. (NACA TN 3641)

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ROCKET-POWERED FLIGHT TEST OF A ROLL-STABILIZED SUPERSONIC MISSILE CONFIGURATION. Robert A. Gardiner and Jacob Zarovsky. January 12, 1950. 32p. diagrs., photos., tab. (NACA RM L9K01a)

FLIGHT INVESTIGATION OF A ROLL-STABILIZED MISSILE CONFIGURATION AT VARYING ANGLES OF ATTACK AT MACH NUMBERS BETWEEN 0.8 AND 1.79. Jacob Zarovsky and Robert A. Gardiner. March 6, 1951. 38p. diagrs., photos., tab. (NACA RM L50H21)

WIND-TUNNEL INVESTIGATION AT SUBSONIC AND LOW TRANSONIC SPEEDS OF THE EFFECTS OF AILERON SPAN AND SPANWISE LOCATION ON THE ROLLING CHARACTERISTICS OF A TEST VEHICLE WITH THREE UNTAPERED 45° SWEPTBACK WINGS. Harold S. Johnson. April 6, 1951. 26p. diagrs., photo., tab. (NACA RM L51B16)

FLIGHT CALIBRATION OF ANGLE-OF-ATTACK AND SIDESLIP DETECTORS ON THE FUSELAGE OF A 35° SWEPT-WING FIGHTER AIRPLANE. Norman M. McFadden, George A. Rathert, Jr., and Richard S. Bray. February 1952. 26p. diagrs., photos. (NACA RM A52A04)

CHORDWISE PRESSURE DISTRIBUTION AT HIGH SUBSONIC SPEEDS NEAR MIDSEMISPAN OF A TAPERED 35° SWEPTBACK WING OF ASPECT RATIO 4 HAVING NACA 65A006 AIRFOIL SECTIONS AND EQUIPPED WITH VARIOUS SPOILER AILERONS. Alexander D. Hammond and Barbara M. McMullan. June 1952. 76p. diagrs., tabs. (NACA RM L52C28)

AN EXPERIMENTAL INVESTIGATION OF BOUNDARY INTERFERENCE ON FORCE AND MOMENT CHARACTERISTICS OF LIFTING MODELS IN THE LANGLEY 16- AND 8-FOOT TRANSONIC TUNNELS. Charles F. Whitcomb and Robert S. Osborne. February 1953. 31p. photos., diagrs., tab. (NACA RM L52L29)

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SLOTTED-BOUNDARY INTERFERENCE EFFECTS ON WEDGE AIRFOILS AT LOW SUPERSONIC MACH NUMBERS. William J. Nelson and Allen R. Vick. July 1953. 27p. diagrs., photos. (NACA RM L53F11)

EFFECT OF VARIABLE VISCOSITY AND THERMAL CONDUCTIVITY ON HIGH-SPEED SLIP FLOW BETWEEN CONCENTRIC CYLINDERS. T. C. Lin and R. E. Street, University of Washington. 1954. ii, 36p. diagrs. (NACA Rept. 1175. Formerly TN 2895)

APPLICATION OF SEVERAL METHODS FOR DETERMINING TRANSFER FUNCTIONS AND FREQUENCY RESPONSE OF AIRCRAFT FROM FLIGHT DATA. John M. Eggleston and Charles W. Mathews. 1954. ii, 24p. diagrs., tabs. (NACA Rept. 1204. Supersedes TN 2997)

DEVELOPMENT OF TURBULENCE-MEASURING EQUIPMENT. Leslie S. G. Kovásznay, John Hopkins University. 1954. ii, 30p. diagrs., photos., tab. (NACA Rept. 1209. Supersedes TN 2839)

A SUMMARY OF INFORMATION ON SUPPORT INTERFERENCE AT TRANSONIC AND SUPERSONIC SPEEDS. Eugene S. Love. January 1954. 26p. diagrs. (NACA RM L53K12)

EFFECT OF GROUND INTERFERENCE ON THE AERODYNAMIC AND FLOW CHARACTERISTICS OF A 42° SWEPTBACK WING AT REYNOLDS NUMBERS UP TO 6.8 x 10^6. G. Chester Furlong and Thomas V. Bollech. 1955. ii, 60p. diagrs., photos., tab. (NACA Rept. 1218. Combination of RM L8G22; TN 2487)

A FREE-FLIGHT WIND TUNNEL FOR AERODYNAMIC TESTING AT HYPERSONIC SPEEDS. Alvin Seiff. 1955. ii, 17p. diagrs., photos. (NACA Rept. 1222. Supersedes RM A52A24)

RECOVERY AND TIME-RESPONSE CHARACTERISTICS OF SIX THERMOCOUPLE PROBES IN SUBSONIC AND SUPERSONIC FLOW. Truman M. Stickney. July 1955. 25p. diagrs., photos., 2 tabs. (NACA TN 3455)

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MEASUREMENTS OF TURBULENT SKIN FRICTION ON A FLAT PLATE AT TRANSONIC SPEEDS. Raimo J(aakko) Hakkinen, California Institute of Technology. September 1955. 41p. diagrs., photo., tabs. (NACA TN 3486)

VISUALIZATION STUDY OF SECONDARY FLOWS IN TURBINE ROTOR TIP REGIONS. Hubert W. Allen and Milton G. Kofskey. September 1955. 33p. diagrs., photos., tab. (NACA TN 3519)

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AVERAGING OF PERIODIC PRESSURE PULSATIONS BY A TOTAL-PRESSURE PROBE. R. C. Johnson. October 1955. 30p. diagrs., photo., tabs. (NACA TN 3568)

AN EXPERIMENTAL COMPARISON OF THE LAGRANGIAN AND EULERIAN CORRELATION COEFFICIENTS IN HOMOGENEOUS ISOTROPIC TURBULENCE. William R. Mickelsen. October 1955. 42p. diagrs. (NACA TN 3570)

A PRELIMINARY INVESTIGATION OF THE EFFECTS OF FREQUENCY AND AMPLITUDE ON THE ROLLING DERIVATIVES OF AN UNSWEPT-WING MODEL OSCILLATING IN ROLL. Lewis R. Fisher, Jacob H. Lichtenstein, and Katherine D. Williams. January 1956. 29p. diagrs., photos. (NACA TN 3554)

A METHOD FOR CALCULATING THE CONTOUR OF BODIES OF REVOLUTION WITH A PRESCRIBED PRESSURE GRADIENT AT SUPERSONIC SPEED WITH EXPERIMENTAL VERIFICATION. Paige B. Burbank. March 1956. 64p. diagrs., photos., tabs. (NACA TN 3555)

AN EVALUATION OF FOUR EXPERIMENTAL METHODS FOR MEASURING MEAN PROPERTIES OF A SUPERSONIC TURBULENT BOUNDARY LAYER. George J. Nothwang. June 1956. 34p. diagrs., photos. (NACA TN 3721)

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AN INVESTIGATION OF A METHOD FOR OBTAINING HYDRODYNAMIC DATA AT VERY HIGH SPEEDS WITH A FREE WATER JET. Bernard Weinflash and John R. McGehee. June 1954. 28p. diagrs., photos., tabs. (NACA RM L54D23)

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CALIBRATION OF STRAIN-GAGE INSTALLATIONS IN AIRCRAFT STRUCTURES FOR THE MEASUREMENT OF FLIGHT LOADS. T. H. Skopinski, William S. Aiken, Jr. and Wilber B. Huston. 1954. ii, 29p. diagrs., 10 tabs. (NACA Rept. 1178. Formerly TN 2993; RM L52G31)

CREEP AND CREEP-RUPTURE CHARACTERISTICS OF SOME RIVETED AND SPOT-WELDED LAP JOINTS OF AIRCRAFT MATERIALS. Leonard Mordfin, National Bureau of Standards. June 1955. 53p. diagrs., photos., 6 tabs. (NACA TN 3412)

A METHOD FOR OBTAINING STATISTICAL DATA ON AIRPLANE VERTICAL VELOCITY AT GROUND CONTACT FROM MEASUREMENTS OF CENTER-OF-GRAVITY ACCELERATION. Robert C. Dreher. February 1956. 21p. diagrs., photo., tabs. (NACA TN 3541)

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(9.2.5)
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FREE-JET TESTS OF A 6.5-INCH-DIAMETER RAM-JET ENGINE AT MACH NUMBERS OF 1.81 AND 2.00. Maxime A. Faget, Raymond S. Watson, and Walter A. Bartlett, Jr. March 7, 1951. 38p. diagrs., photos. (NACA RM L50L06)

PROPAGATION OF A FREE FLAME IN A TURBULENT GAS STREAM. William R. Mickelsen and Norman E. Ernstein. July 1955. 89p. diagrs., photos., 2 tabs. (NACA TN 3456)

THE EFFECTIVENESS OF WING VORTEX GENERATORS IN IMPROVING THE MANEUVERING CHARACTERISTICS OF A SWEPT-WING AIRPLANE AT TRANSONIC SPEEDS. Norman M. McFadden, George A. Rathert, Jr., and Richard S. Bray. September 1955. 43p. diagrs., photos., tab. (NACA TN 3523. Supersedes RM A51J18)

A POLAR-COORDINATE SURVEY METHOD FOR DETERMINING JET-ENGINE COMBUSTION-CHAMBER PERFORMANCE. Robert Friedman and Edward R. Carlson. September 1955. 29p. diagrs., photo., tab. (NACA TN 3566)

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A SONIC-FLOW ORIFICE PROBE FOR THE IN-FLIGHT MEASUREMENT OF TEMPERATURE PROFILES OF A JET ENGINE EXHAUST WITH AFTERBURNING. C. Dewey Havill and L. Stewart Rolls. May 1956. 18p. diagrs., photos. (NACA TN 3714)

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PERFORMANCE AND OPERATIONAL STUDIES OF A FULL-SCALE JET-ENGINE THRUST REVERSER. Robert C. Kohl. April 1956. 38p. diagrs., photo. (NACA TN 3665)

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ROCKET-POWERED FLIGHT TEST OF A ROLL-STABILIZED SUPERSONIC MISSILE CONFIGURATION. Robert A. Gardiner and Jacob Zarovsky. January 12, 1950. 32p. diagrs., photos., tab. (NACA RM L9K01a)

APPLICATION OF SEVERAL METHODS FOR DETERMINING TRANSFER FUNCTIONS AND FREQUENCY RESPONSE OF AIRCRAFT FROM FLIGHT DATA. John M. Eggleston and Charles W. Mathews. 1954. ii, 24p. diagrs., tabs. (NACA Rept. 1204. Supersedes TN 2997)

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A COMPARISON OF TWO METHODS FOR COMPUTING THE WAVE DRAG OF WING-BODY COMBINATIONS. Alberta Alksne. April 1955. 32p. diagrs. (NACA RM A55A06a)

MAXIMUM THEOREMS AND REFLECTIONS OF SIMPLE WAVES. P. Germain, Brown University. June 1955. 22p. (NACA TN 3299)

PRACTICAL CONSIDERATIONS IN SPECIFIC APPLICATIONS OF GAS-FLOW INTERFEROMETRY. Walton L. Howes and Donald R. Buchele. July 1955. ii, 95p. diagrs., photos. (NACA TN 3507)

EXTRAPOLATION TECHNIQUES APPLIED TO MATRIX METHODS IN NEUTRON DIFFUSION PROBLEMS. Robert R. McCready. July 1955. 32p. diagrs. (NACA TN 3511)

FROM LINEAR MECHANICS TO NONLINEAR MECHANICS. (De la mécanique linéaire a la mécanique non linéaire). Julien Loeb. October 1955. 18p. diagrs. (NACA TM 1396. Trans. from Annales des Telécommunications, v.5, no. 2, Feb., 1950, p. 65-71)

SOUND PROPAGATION INTO THE SHADOW ZONE IN A TEMPERATURE-STRATIFIED ATMOSPHERE ABOVE A PLANE BOUNDARY. David C. Pridmore-Brown and Uno Ingard, Massachusetts Institute of Technology. October 1955. 57p. diagrs., photo. (NACA TN 3494)

METHOD AND TABLES FOR DETERMINING THE TIME RESPONSE TO A UNIT IMPULSE FROM FREQUENCY-RESPONSE DATA AND FOR DETERMINING THE FOURIER TRANSFORM OF A FUNCTION OF TIME. Carl R. Huss and James J. Donegan. January 1956. 38p. diagrs., tabs. (NACA TN 3598)

ON THE INSTABILITY OF METHODS FOR THE INTEGRATION OR ORDINARY DIFFERENTIAL EQUATIONS. (Über die Instabilität von Methoden zur Integration gewöhnlicher Differentialgleichungen). Heinz Rutishauser. April 1956. 15p. (NACA TM 1403. Trans. from Zeitschrift für angewandte Mathematik und Physik, v.3, 1952, p.65-74)

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SUMMARY OF SCALE-MODEL THRUST-REVERSER INVESTIGATION. John H. Povolny, Fred W. Steffen, and Jack G. McArdle. February 1956. 49p. diagrs., photos. (NACA TN 3664)

THERMODYNAMIC PROPERTIES OF GASEOUS NITROGEN. Harold W. Woolley, National Bureau of Standards. March 1956. 114p. diagrs., tabs. (NACA TN 3271)

GENERALIZED TABLES OF CORRECTIONS TO THERMODYNAMIC PROPERTIES FOR NONPOLAR GASES. Harold W. Woolley and William S. Benedict, National Bureau of Standards. March 1956. 62p. diagrs., tabs. (NACA TN 3272)

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